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PROGRESS REPORT ON THE SINGLE EUROPEAN ELECTRONIC COMMUNICATIONS MARKET (15th REPORT)

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MARKET AND ECONOMIC DEVELOPMENTS

FINANCIAL AND ECONOMIC SECTOR OVERVIEW

Although the electronic communications sector weathered the economic downturn in 2009, the maturing nature of traditional markets such as fixed and mobile voice presents significant challenges to growth. The sector is facing its biggest transformation since liberalisation with the transition to an all-IP environment both in fixed and mobile networks. Voice communications are increasingly being replaced by internet-based calls or being included in broadband bundles. The sector's organic growth based on new subscriptions is slowing down for legacy mobile and broadband markets. At the same time, increases in data traffic are not yet compensating for declining prices and voice traffic.

The economic climate in 2008 and 2009 led to weakened user spending (corporate spending in particular) yielding close-to-zero revenue growth while access to credit was restrained temporarily. Large cost cutting plans (in particular in terms of capital expenditure (CAPEX)), combined with business models based on flat rates, have however ensured continued profitability throughout the crisis.

While achieving significant growth is challenging, there are some good prospects for a return to positive growth rates in 2010/2011 driven by the recovery of GDP and increased consumer spending. Furthermore, continued cost-cutting strategies are expected to fuel profitability and provide scope for increased investment in network upgrades and next-generation access.

Revenues

Revenues for the EU electronic communications sector were €351 billion in 2008[1] in the EU, which account for about half of the ICT sector overall. Seven of the ten largest telecoms operators in the world are European. 43% of the sector revenues are driven by fixed voice telephony and broadband (both business and private users), 47% are provided by mobile communications (voice and data), with the remaining 10% from Pay TV.

It is estimated that the growth rate for revenues in the electronic communications sector (both wholesale and retail markets) in 2009, was close to zero[2] (Table 1). As European markets mature, revenue growth is stronger for those operators which are active in markets outside the EU[3].

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1 Data from national regulatory authorities

2 EITO European Information Technology Observatory 2009

3 This includes the US, China, India, South Africa and Latin American countries. Despite the strong impact of the economic slowdown, in the US for example telecom revenue growth is estimated to reach a positive rate in 2009, albeit below 1%, driven by growth in mobile markets. The US in 2009 started off from a lower penetration rate than the EU (89% in June 2009 in the US compared to 121% in October 2009 in the EU). However, it is the more dynamic development of mobile data services, led in particular by the earlier arrival of a particular brand of smartphones, that has made a difference with Europe in 2009.

Table 1

	Growth rate	Share in telecom service revenues
Fixed voice telephony and Internet access and services	-2.5%	36%
fixed voice telephony	-6.3%	24%
internet access and services	5.6%	12%
Mobile voice telephony and mobile data services	0.6%	47%
mobile voice telephony	-1.8%	36%
mobile data services	9.3%	11%
Business data services	0.6%	7%
Pay TV	11.7%	10%
Total Telecom Services (Carrier Services)	0%	100%

Source: EITO (2009)

The mobile sector is experiencing close-to-zero growth. Unlike for the fixed sector where flat-rate offers are common, mobile services are more elastic and leave room for higher fluctuations in volume, especially for voice communications. The share of revenues accounted for by mobile voice is declining while SMS revenues are not growing to any significant extent. Mobile broadband services are growing fast, although these still account for a relatively small part of the overall mobile revenues. Nonetheless, with the rise of smartphones and dongles mobile broadband services are expected to play a positive role in terms of future revenue growth.

The fixed sector has performed slightly better than the mobile segment over the course of the crisis, largely as a consequence of positive growth in broadband services. However, fixed voice telephony revenues continue their decline.

Investment

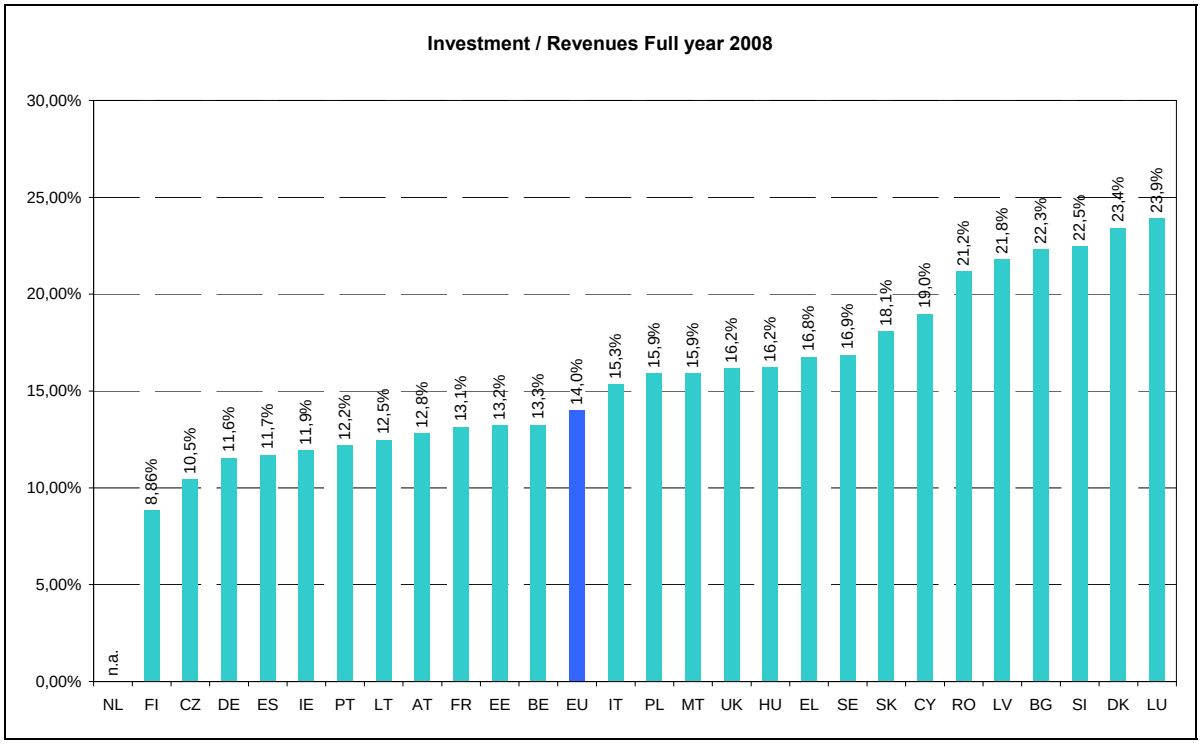
Investment by the EU electronic communication sector accounted for €47 billion in 2008[4], which represents a drop of 1.5% on 2007. Investment in the fixed market accounted for 70% of the total (incumbents are responsible for 70% of that figure) while the mobile sector was responsible for the remaining 30%.

[4] NRA data excluding the Netherlands

To offset the slow revenue growth in 2009, incumbent operators focused on cost cutting strategies using two main approaches: restructuring activities (OPEX) and cutting investment (CAPEX). Furthermore, operators are seeking agreements to share infrastructure and spectrum with competitors.

Investment is declining at a faster pace than revenues. The intensity of investment as measured by the CAPEX/revenues ratio is declining but is estimated to remain around 11%[5] (from a level of 14% in 2008 and 15% in 2007). With the exception of Denmark and Luxembourg, the ratio CAPEX/revenues is higher in the newer Member States (Figure 1).

Figure 1



Despite the fact that most investment in the EU is in fixed networks, only a very small proportion of that is currently in new fibre-based access technologies. Alternative operators are increasing their investment in unbundled wholesale products while incumbents are mostly targeting upgrading of legacy infrastructure. Cable operators are currently upgrading their fibre networks. In the mobile sector, investment is currently focused on increasing HSDPA coverage. LTE had its first commercial launch in 2009 in Sweden. However, in a majority of Member States the commercial launch of LTE has been delayed until 2010-2011, with extensive deployment expected in 2013-2014[6].

Access to finance in capital markets returned, in the second half of 2009, to its pre-crisis levels. In the 3rd Quarter of 2009, the EU bond issue was above 2007 levels[7]. Most telecom operators are well rated by rating agencies. In 2009, the telecoms sector Dow Jones SXKP

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5 Data from 2009 comes from the European operations revenues of the 27 top telecom operators between January and September 2009

6 JP Morgan, Telecom Services, 22 September 2009

7 Société Générale, presentation at DigiWorld 2009

index performed better than the index stoxx 50[8]. This performance was mainly driven by dividend strategies and a conservative approach to investment.

CHALLENGES FOR FIXED AND MOBILE MARKETS

The complementary nature of fixed and mobile operations has led to significant consolidation of these two activities by the main telecoms groups. Nevertheless these two markets have different characteristics and structures and face different challenges.

The fixed sector shows strong national characteristics. This national dimension is most likely the result of governments' strategic considerations regarding nation-wide networks (which started with fixed telephony and carried over to broadband markets) as well as of a fragmented regulatory environment. The fixed sector is currently facing migration to fibre-based access technologies, which is a costly process, in particular because of significant civil engineering costs. Deployment of fibre is taking place mainly in densely populated high-rise areas and in large cities, whilst the business models for deployment in other areas are currently uncertain.

Uncertainty around future activities in this segment does not make the business case for mergers and acquisitions particularly attractive. There could be room however for small scale consolidation activities. For example, in 2009, some medium-sized alternative operators acquired smaller players. Network sharing and other collaborative agreements are likely to emerge as a response to the high investment costs envisaged in the sector.

There is a much greater European dimension in the mobile sector, at least in terms of ownership. Almost 80% of EU citizens subscribe to one of the four main mobile groups[9] (460 million subscribers) leaving little room for further consolidation. However, there could be further scope to achieve cost reductions through integration and sharing agreements leading to further possible acquisitions of medium and small sized operators by the larger players.

The four main groups are present in the majority of Member States (in the form of subsidiary, joint venture or commercial agreement) and they own the first and/or second largest mobile operator in almost all EU Member States (except in Denmark, Latvia and Finland). Most of the main mobile operators are subsidiaries of fixed incumbents. The only large European group which is not the subsidiary of a fixed incumbent has now entered the fixed market to complement its activities (in order to be able to supply convergent offers, e.g. quadruple-play). While half of European operators are not part of these groups, these represent only 20% of the European market[10].

While mobile operators' strategies (e.g. in terms of negotiations with suppliers or investment decisions) are European, mobile services are produced and marketed at the national level. The approach to auctioning of spectrum licences has led to a national focus which has not yet translated into pan European services.

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8 A representation of well-established companies having stable earnings and no extensive liabilities in the Eurozone.

9 For a complete list of the operators taken into account see Annex 2.

10 The top 10 mobile operators concentrate 90% of the market.

A lot of the innovation in electronic communications currently comes from internet companies, which are outside the traditional boundaries of the sector. These are mainly Internet platforms offering a wide range of web services in the wake of the cloud computing transformation. Some are also investing in backbone networks to facilitate the throughput of traffic. The frontiers between the different actors in the value chain are therefore blurring. The new battle in the technology world is taking place in mobile broadband services through smartphones and mobile operating systems.

MOBILE COMMUNICATIONS

Mobile communications have been driving half of the sector's revenues in recent years. However, the mobile sector is now at a crossroads, with the advent of mobile broadband services and the ongoing challenge to traditional revenues. While declining, voice revenues still represent 81% of the overall mobile sector revenues in 2008 compared with 86% in 2007. SMS revenues are stabilising at around 12% of the total whereas mobile internet revenues have doubled between 2007 and 2008. However, mobile internet still drives only 4% of the total revenue with significant divergence across Member States.

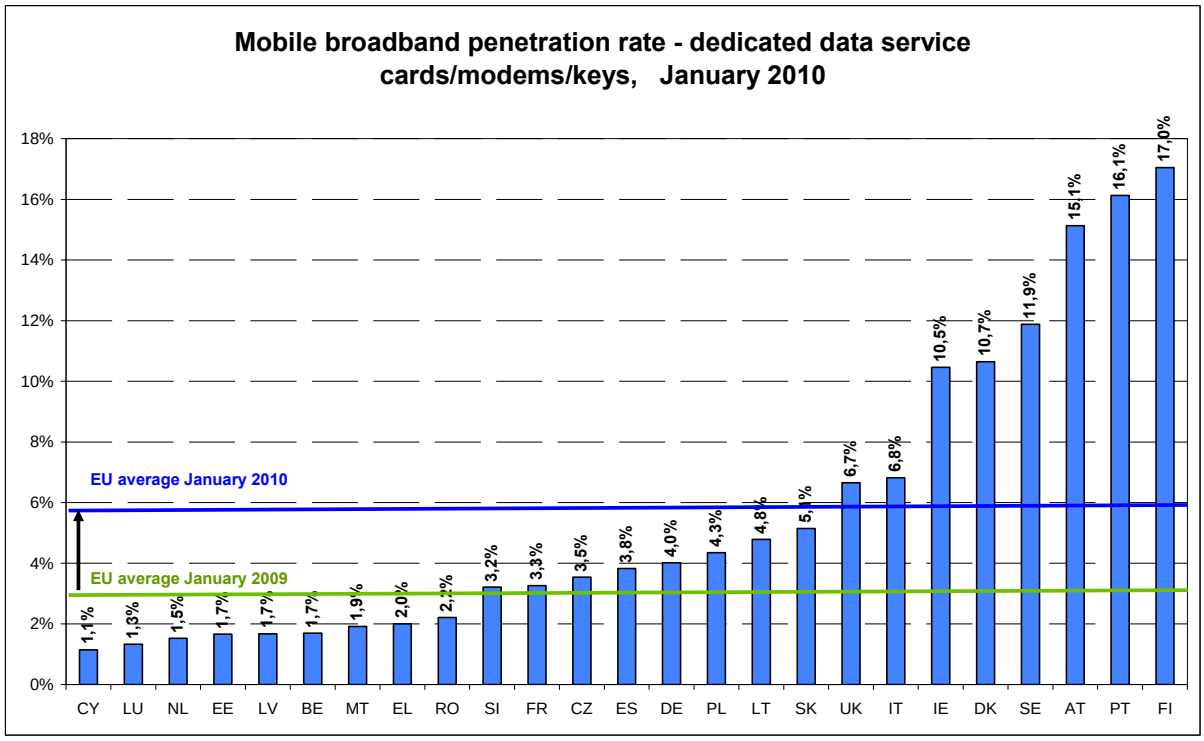
The rapid increase in the take-up of mobile broadband is expected to put more pressure on network capacity (since it uses relatively more capacity than voice). However, this increased traffic may only produce correspondingly limited revenue growth given that retail offerings are increasingly based on flat rates. As traditional markets mature, and as regulation creates the conditions for increased competition (faster portability and lower prices thanks to lower termination rates), exploiting the potential profitability of mobile broadband is one of the main challenges ahead for the sector. The transition from voice telephony to all-IP broadband mobile networks will also represent a major challenge both for operators and regulators.

Mobile Broadband

The mobile broadband market is emerging rapidly. The average EU penetration rate of dedicated mobile broadband cards is 5.2% of population and is growing fast (more than 86% between January 2010 and January 2010, Figure 2), responding to demand for ubiquitous internet access. In six Member States (Finland, Portugal, Austria, Sweden, Ireland and Denmark) the penetration rate exceeds 10%. While in the short term mobile broadband may be substituting for sales of fixed broadband lines in certain cases[11], in the long term it is expected to complement the supply of fibre-based next-generation access.

[11] See C(2009)10006 (case AT/2009/0970) http://circa.europa.eu/Public/irc/infso/ecctf/library?l=/sterreich/registeredsnotifications/at20090970/at-2009-0970_acte-withdr/_EN_1.0_&a=d

Figure 2



Mobile data services, however, do not yet constitute a significant source of revenues[12]. The introduction of flat rates and bundles has been one of the main drivers of the development of mobile broadband, but this pricing approach often leads to reduced average revenue streams per user. In the future, the development of mobile VoIP solutions may also impact on the structure of business models. While the recent economic crisis has contributed to negative growth in mobile capital expenditure (-2.4% in 2008[13]), the rise in data traffic will require upgrades to increase network capacity and hence further investment. Operators are looking to new business arrangements such as network sharing or spectrum re-farming. New value-added services such as mobile payments are also expected to create new sources of revenues.

Mobile internet access has been driven by the take up of new smartphones and applications[14] which determine the way users access the web on the move. Internet companies are innovating in the end-user market. Frontiers between the different parts of the value chain are blurring bringing new actors to the market. Competition for the provision of internet and web-based services, which are financed through downloads and advertisement, is taking place over mobile platforms, smartphones and mobile operating systems.

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12 According to Markendhal, Mölleryd, Mäkitalo and Werding (2009), in " Business Innovation Strategies to reduce the revenue gap for wireless broadband services" in Communications&Strategies, n°75 – 3rd Quarter 2009, in comparison with voice, mobile broadband subscribers are using on average 130 times more traffic while paying only 1% of the price per MB.

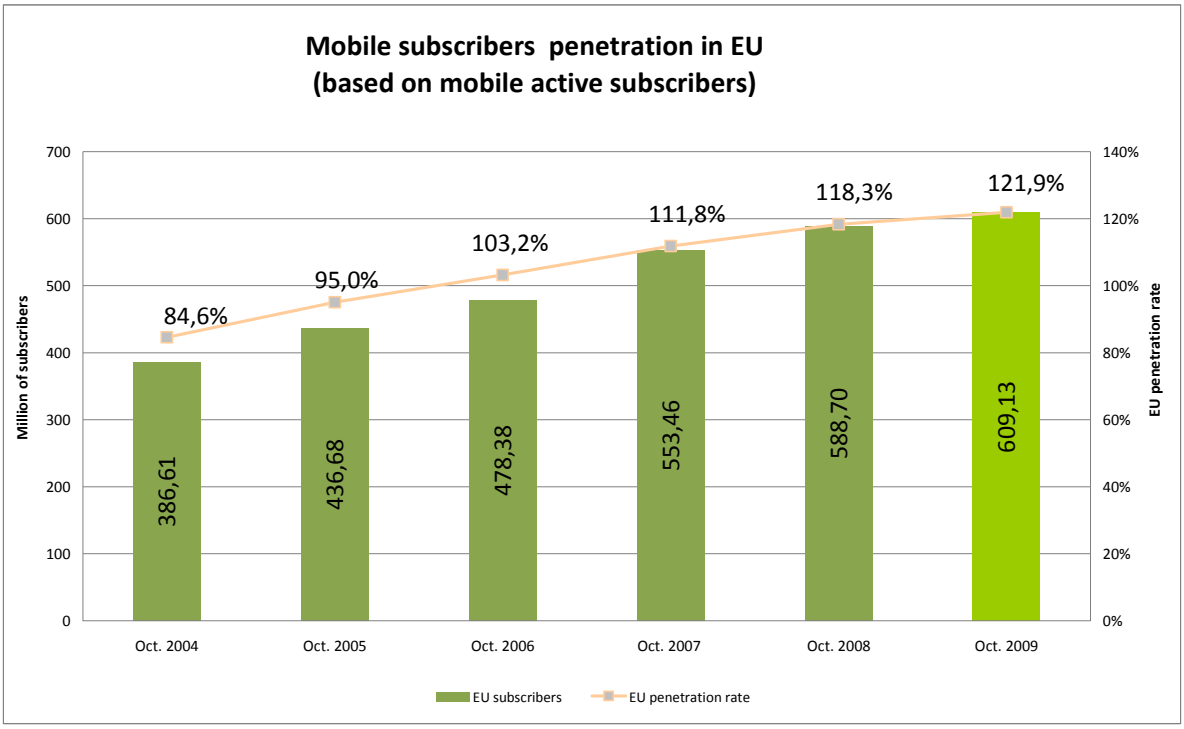
13 Source: NRAs

14 Morgan Stanley: Mobile Internet Report. December 15, 2009. http://www.morganstanley.com/institutional/techresearch/pdfs/mobile_internet_report.pdf

Traditional markets are maturing

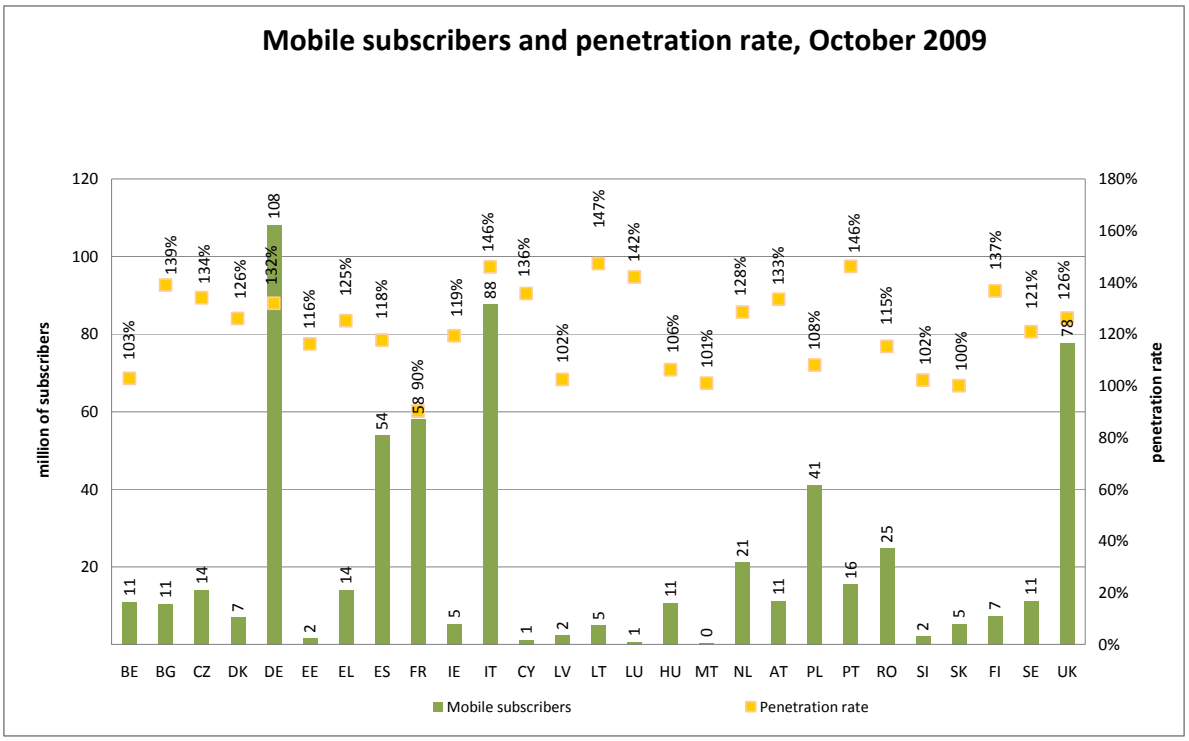
Mobile voice penetration in the EU reached 121.9% and, as expected, its growth rate in 2009 has begun to stabilise (+2.5%) (Figure 3). An average penetration rate above 100% indicates the use of multiple SIM cards per person (for example for business and private purposes).

Figure 3



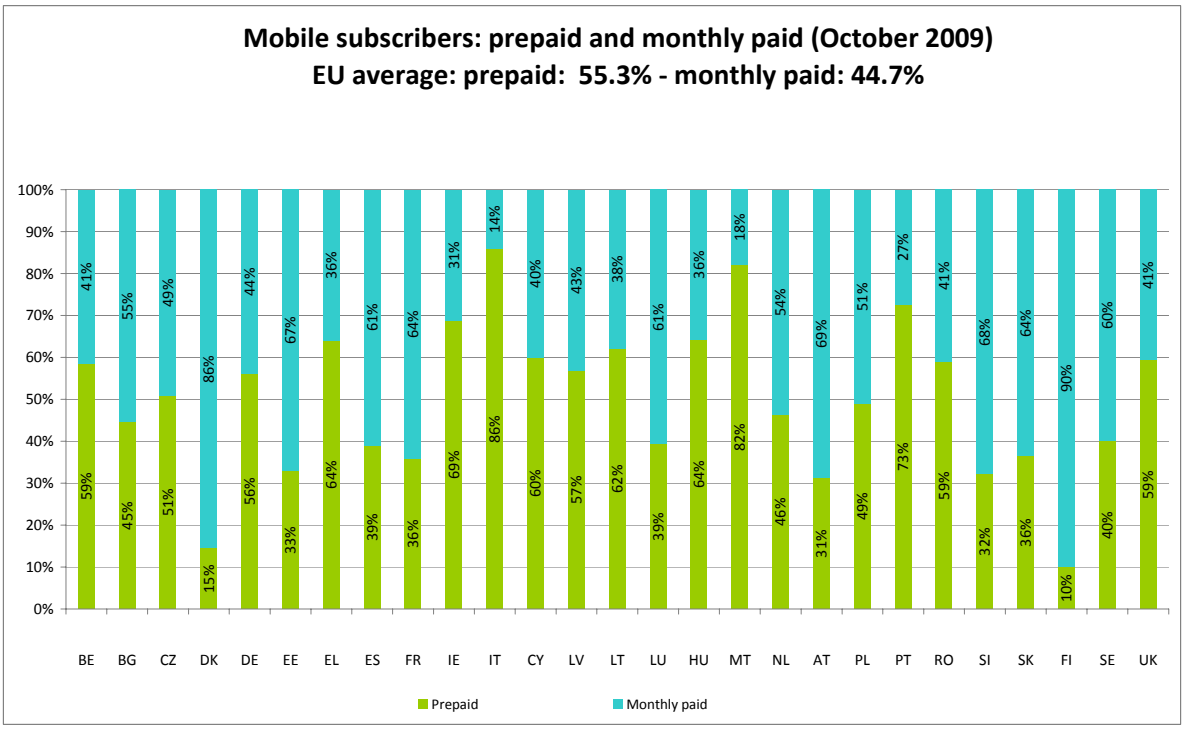
Penetration rates increased significantly from 2008 levels in Portugal, Romania and Finland. Following a review by operators of their subscriber databases, mobile penetration rates have been lowered in Italy and Estonia. As for last year, France has the lowest penetration rate in Europe. This is due to some extent to the policy of limited promotion of prepaid offers used by French operators (Figure 4).

Figure 4



Although the ratio of prepaid to postpaid subscribers is diverse across Europe, the number of prepaid subscribers continues to decline to the benefit of postpaid: from 58.2% in 2008 to 55.3% in 2009 (Figure 5). Italy and Malta have the highest proportion of prepaid users due to their operators' business strategies.

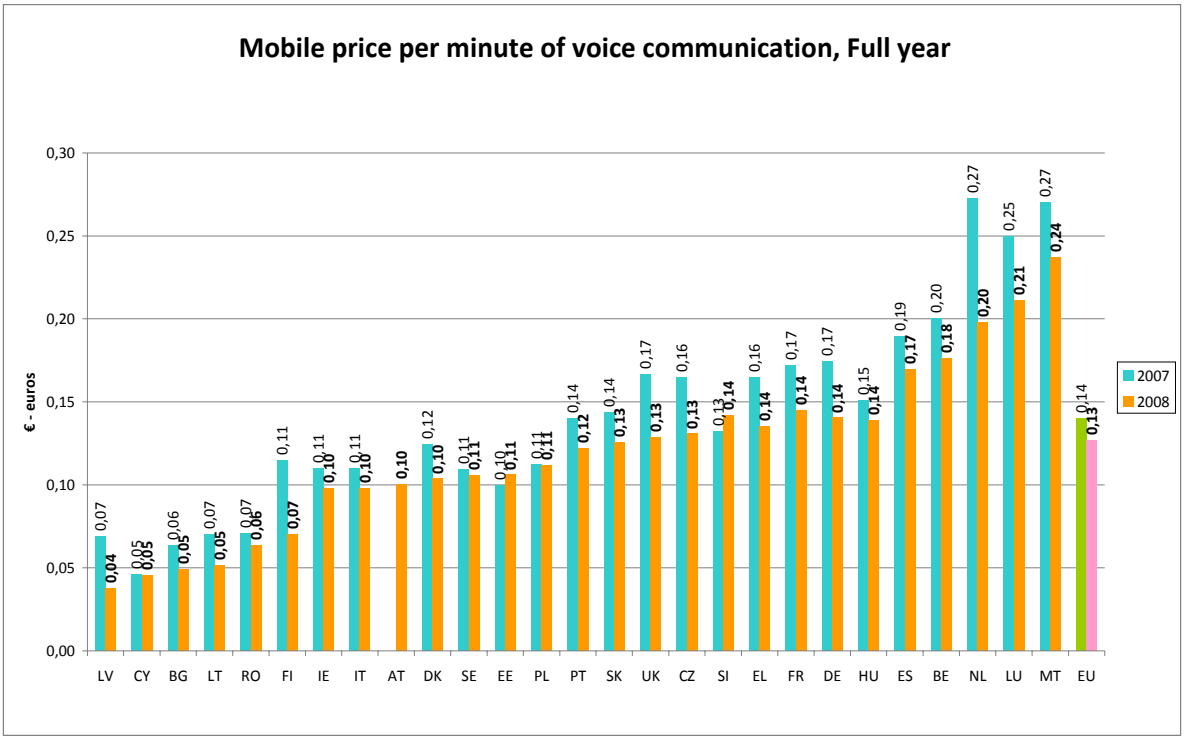
Figure 5



The spending of the average European SIM card owner continues to decline. Mobile ARPU (average revenue per user, calculated as total mobile revenues divided by the total number of users) has decreased in Europe from €369 per user in 2007 to €323 per user in 2008.

Prices also continue to fall (Figure 6). The price per minute for mobile communications has declined from €0.14 in 2007 to €0.13 in 2008[15]. The most significant declines took place in Finland and Latvia. Strengthened competition, (explained also by more effective regulation of termination rates), the introduction of flat-rate offers as well as lower roaming charges were the main factors leading to the decreases. In general, the wide differences between the countries with the cheapest and the most expensive prices are a demonstration of the lack of internal market and divergent market characteristics across the Member States.

Figure 6



Since 2004, mobile telephony prices, as measured by the OECD baskets methodology[16], have decreased for all consumer patterns (Figure 7).[17] While prices in the low[18] and medium[19]

15 The increases in Estonia and Slovenia are minimal and due to rounding.

16 OECD methodology is based on baskets defining average consumptions for different services. The definition of the OECD baskets include the criteria to cover at least 50% of the market share of each country, based on available subscriber numbers. This will normally include the two largest operators in each country. All relevant packages from each operator are considered, but the final results presented here only show the cheapest package for each basket. In order to built the baskets, Teligen has collected tariff data from primary sources, i.e. directly from the telecoms operators, their websites and pricelists. Data was validated by the NRAs so as to reinforce the reliability of the information. For more information see Annex.

17 For the purposes of the graphs, baskets using 20002 OECD methodology have been used.

18 Defined as 25 outgoing calls (37 minutes) per month + 30 SMS messages - 42% of calls are to fixed line phones, 58% to mobile phones

19 Defined as 75 outgoing calls (148 minutes) per month + 35 SMS messages - 36% of calls are to fixed line phones, 64% to mobile phones

usage basket have fallen by around 38%, those in the high[20] usage basket have decreased by nearly 44% since 2004.

Figure 7a

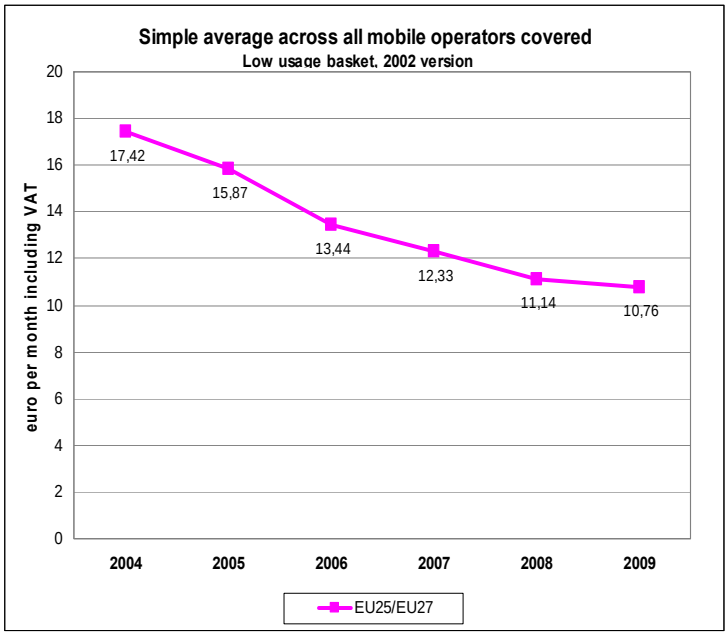
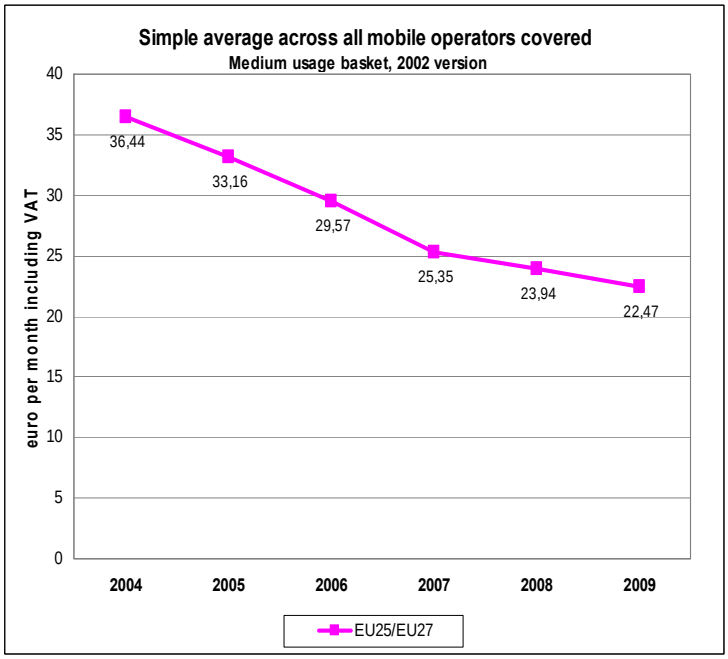
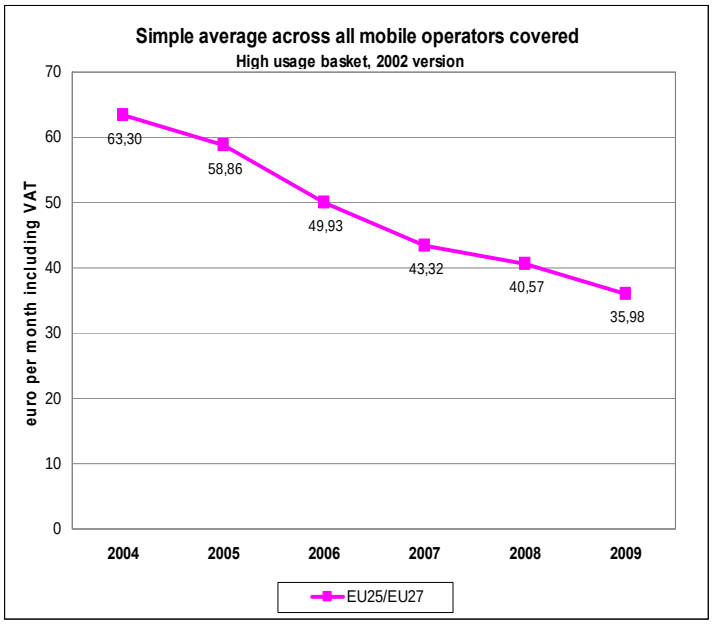


Figure 7b



[20] 150 outgoing calls (315 minutes) per month + 42 SMS messages - % of calls are to fixed line phones, 60% to mobile phones

Figure7c

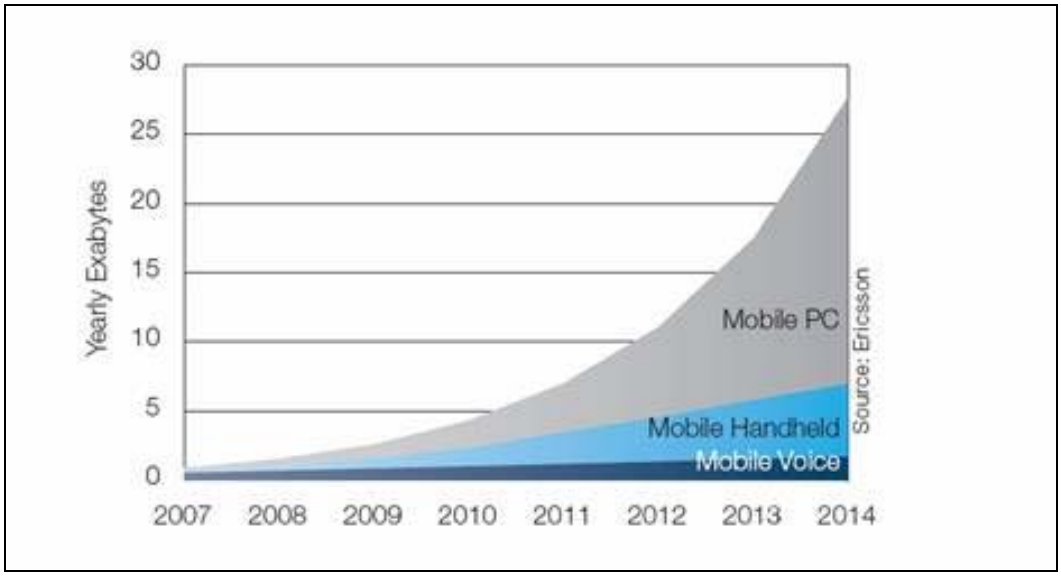


Mobile traffic is increasing

While prices fall and number of subscribers grows only marginally, the volume of mobile voice telephony traffic (in terms of minutes) at the expense of fixed voice telephony (which remains stable in volume). Mobile voice telephony represents today 47% of the traffic in minutes while fixed voice telephony represents 53%. If the current trend continues, mobile voice telephony will already be greater than fixed voice telephony in 2009/2010.

The volume of mobile voice traffic increased in 2008 by 13% while the retail price per minute decreased in a similar proportion. Voice traffic will soon give way to data traffic (Figure 8) with important consequences for network capacities.

Figure 8



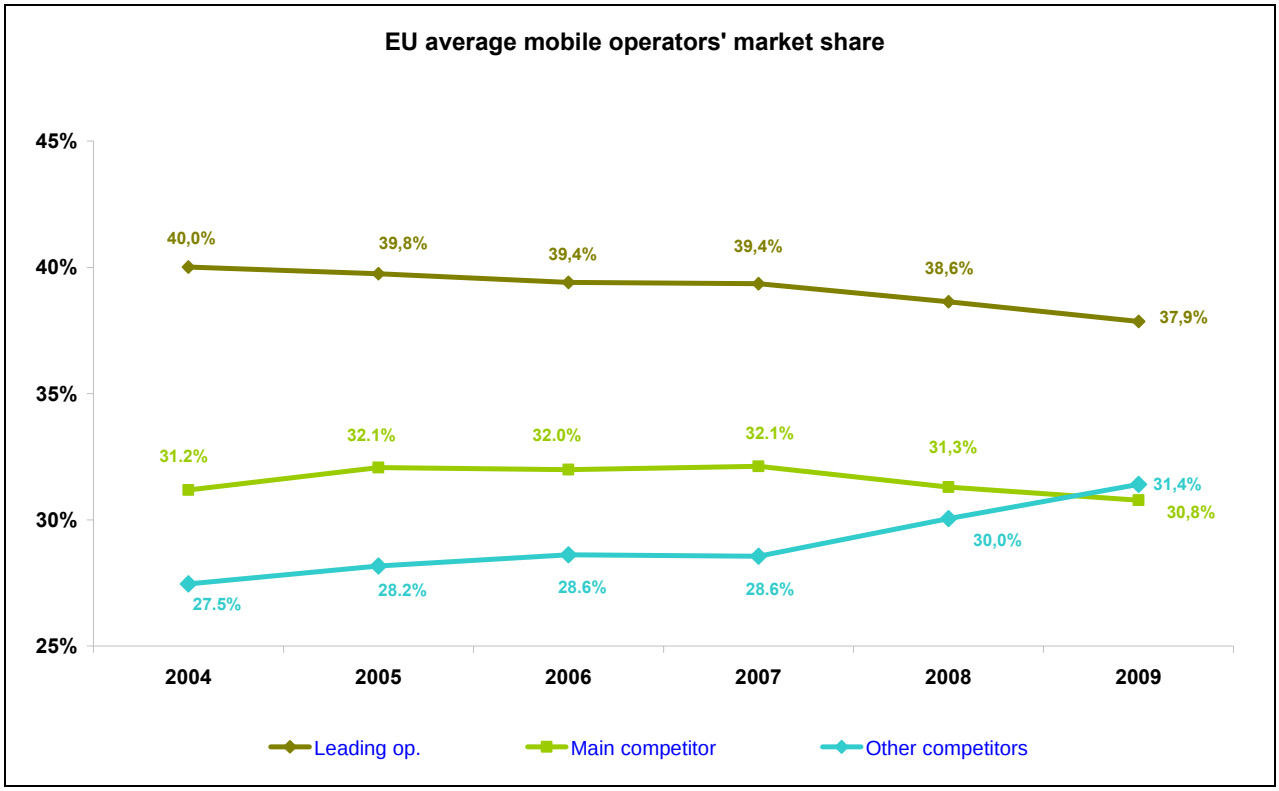
The European dimension of the mobile services industry

While prices for services and equipment may differ, the patterns of competition in mobile markets are not as diverse across the EU Member States as they are in fixed markets (where different technology-mixes play an important role). Mobile markets in the EU Member States usually count three to four network operators. At a national level, the market share of the leading operator is generally below 40%[21] and the main competitor average market share is around 30%. The leading operator and/or the main competitor are usually owned by one of the four main mobile groups which have pan European strategies in terms of marketing and of bargaining with suppliers. In terms of services, however, markets remain national.

The mobile sector is quite concentrated. Almost 80% of Europeans subscribe to one of the four main mobile groups in Europe (460 million subscribers)[22], which are present in the majority of the Member States. These companies, except for one, are subsidiaries of the main incumbents in the fixed market.

The market shares of the leading operator and the main competitor continue to decrease albeit only slightly in the EU Member States due to the appearance of Mobile Virtual Network Operators (MVNOs) targeting specific segments of the market (Figure 9).

Figure 9



The EU average market share of the leading operator continues to follow a downward trend but has dropped by only 2.1 percentage points since 2004. For the first time, in 2009, the

21 In some cases this is much lower e.g. in the UK around 21%

22 Including subsidiaries and network agreements.

market share of the main competitor is below that of the remaining operators combined. The leading operator has the lowest market share in the UK (21%) and Poland (33%).

The impact of regulation: mobile termination rates and portability

Mobile Termination Rates

Mobile termination rates (MTRs) continued to fall in 2009 (fall of 18.4% compared to 14.8% a year ago). While such decreases clearly have an impact at the retail level, other factors such as the introduction of flat-rate offers also affect retail prices. Moreover, in 2008, while the MTRs declined, the number of interconnected minutes went up by 5.2%.

Despite the decline, MTRs remain high when compared to fixed interconnection rates. Regulation is effectively bringing down interconnection rates in the EU as a whole through glide-path mechanisms. Further reductions are expected as the NRAs implement the Commission Recommendation on terminations rates.

There remain major discrepancies remain between MTRs in different Member States (Figure 10). The rates are lowest in Cyprus (1.95 euro-cent) while Bulgaria still has the highest (12.14 euro-cent) (Figure 11).

Figure 10

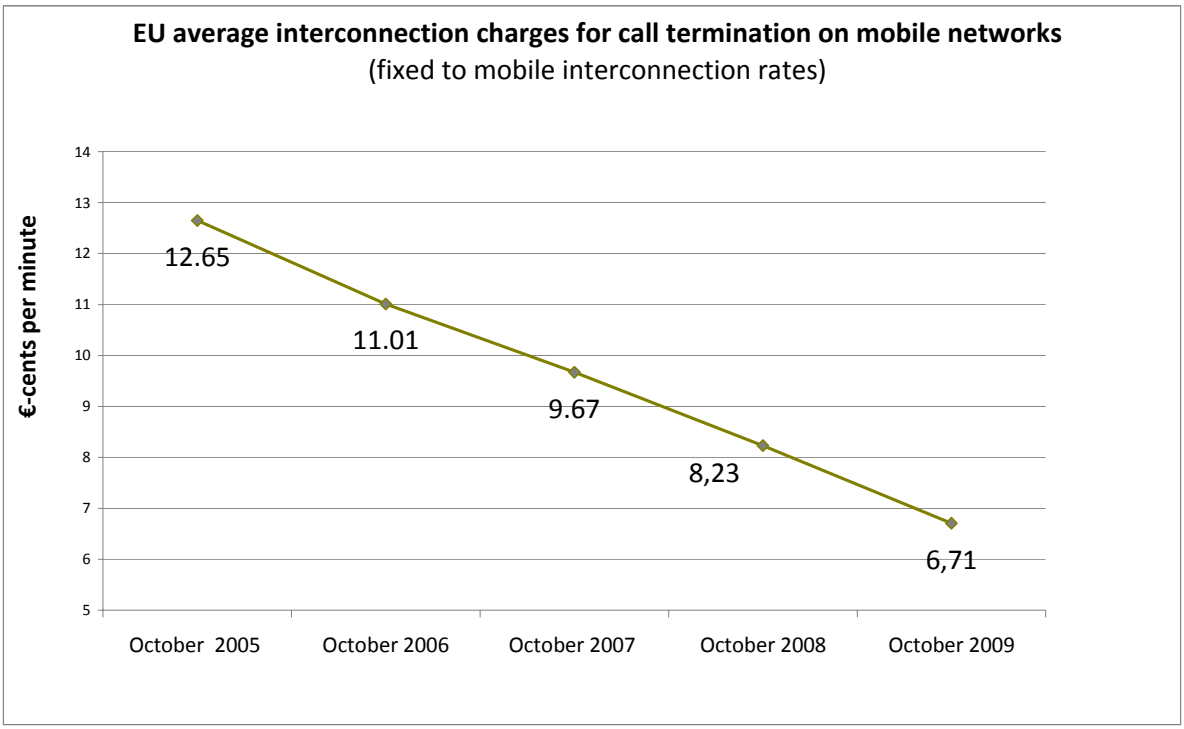
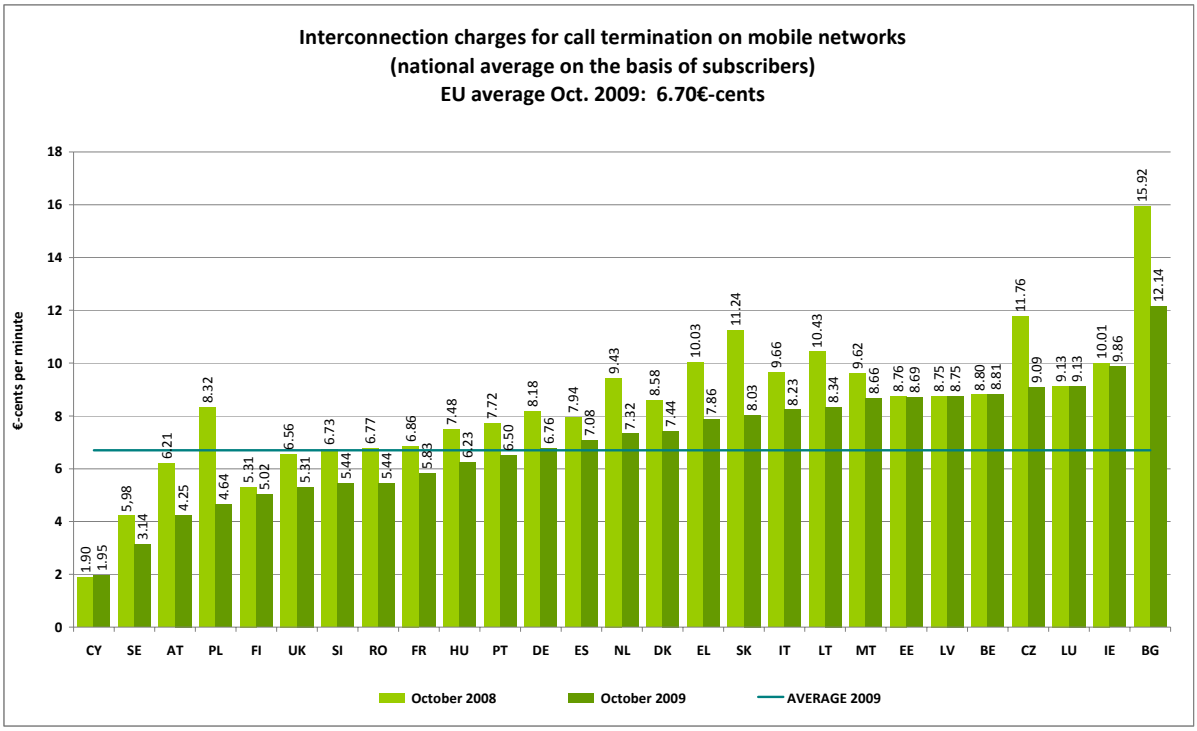
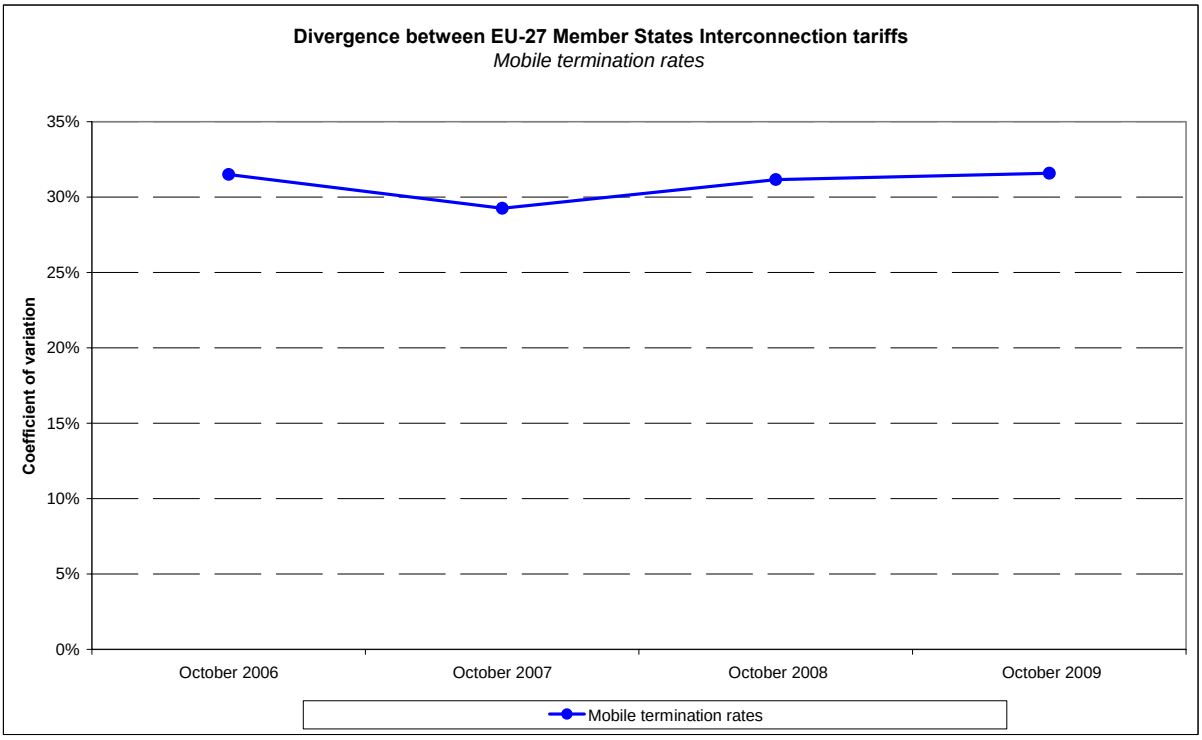


Figure 11



Divergences in mobile termination rates among Member States (Figure 12) have not decreased over the last years.

Figure 12[23]

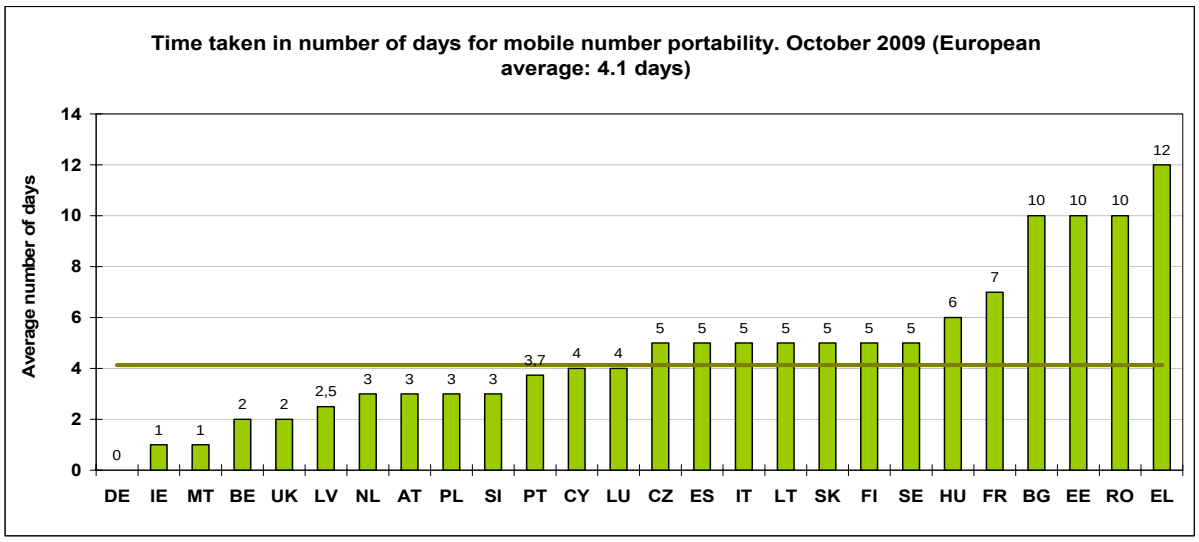


23 The coefficient of variation is the ratio of the standard deviation to the mean

Mobile Portability

Number portability is now available in all Member States. The timing and the level of charges are important factors affecting the porting of numbers. Significant reductions in time limits were introduced or were planned. The average time taken for mobile number portability (wholesale level) in the EU is 4.1 days, a considerable reduction from 8.5 days in 2008 (Figure 13).

Figure 13



BROADBAND

In 2009 the EU broadband market continued to be the largest in the world, with some Member States leading in terms of penetration rates. The EU fixed broadband penetration rate reached 24.8%[24] (Figure 14), an increase of 2 percentage points over the previous year despite a significant slowdown in the growth rate. Most of the EU broadband lines are based on xDSL technologies. Mobile broadband take-up is growing but the deployment of high-capacity broadband is currently limited: While 83.4% of fixed broadband lines in the EU offer speeds above 2 Mbps only 23.2% of them are above 10 Mbps. Retail prices declined, mostly as a consequence of quality (speed) upgrades, and bundled offers are on the rise.

Since July 2003 the incumbents' market share in the fixed broadband market has been following a downward trend which in 2010 stabilised at around 45%; however, in some countries, the incumbents are regaining market share. Local loop unbundling (fully unbundled lines and shared access) is the principal means by which new entrants can offer retail DSL services (73.7% of new entrants' DSL lines, up from 69.2% in January 2009), mostly at the expense of resale which has shrunk by 3 percentage points during the last year.

Growth in fixed broadband lines has been the lowest since 2003

Broadband markets in 2009 continued to be a positive source of revenue growth for the electronic communications sector, although at lower rates than in previous years. In January

[24] Penetration rate based on population as of 1st January 2010

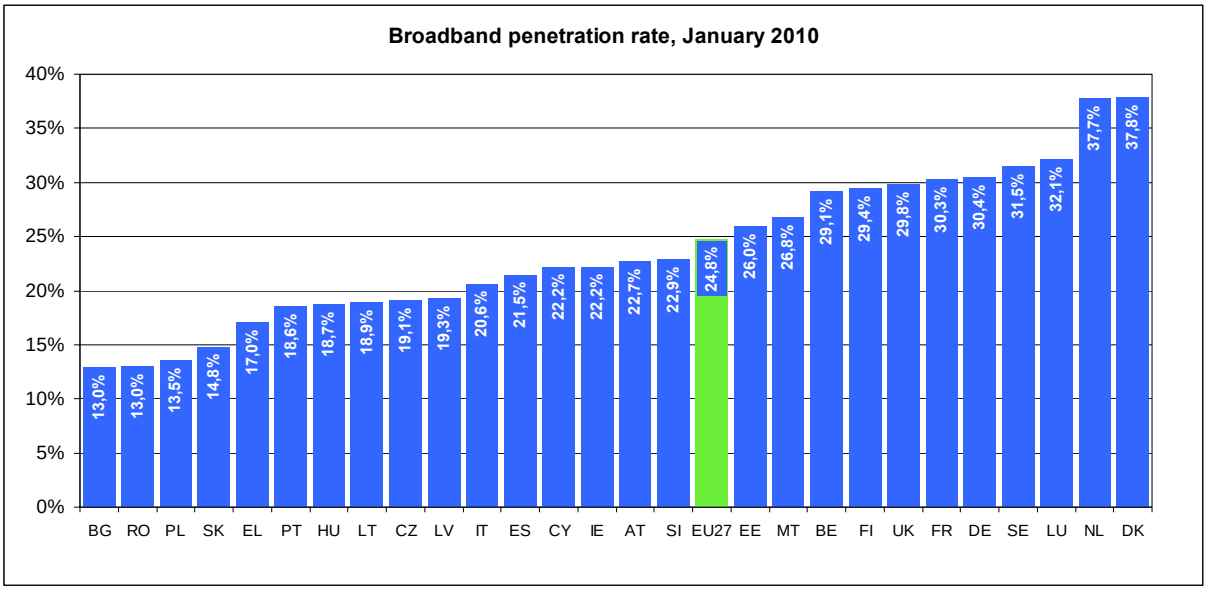
2010 there were 123.7 million fixed broadband lines, up 9.3% since January 2009, and the EU average fixed broadband penetration rate[25] reached 24.8%, up 2percentage points over one year. Nevertheless, with 10.2 million new fixed broadband lines, i.e. 28 199 net additions per day, the growth rate was 24.5% lower than a year earlier and the lowest in the last five years (Table 2).

Table 2

Period	January 04	January 05	January 06	January 07	January 08	January 09	January 10
BB lines	23 302 070	39 488 334	59 348 726	80 117 975	99 812 771	113 446 213	123 738 940
BB penetration	4.9%	8.2%	12.1%	16.3%	20.2%	22,8%	24.8%
New lines per day	28.752	44.225	54.412	56.902	53.958	37 250	28 199

Overall growth in fixed broadband penetration has been slowing down over the past 2 years and only in five countries (Luxembourg, Hungary, Portugal, Slovakia and Sweden) was the number of net additions in 2009 greater than in 2008. In a number of cases markets appear to approach maturity which in some cases is combined to some extent with broadband fixed-mobile substitution. This would appear to be the case for countries such as Denmark or Finland, for instance.

Figure 14

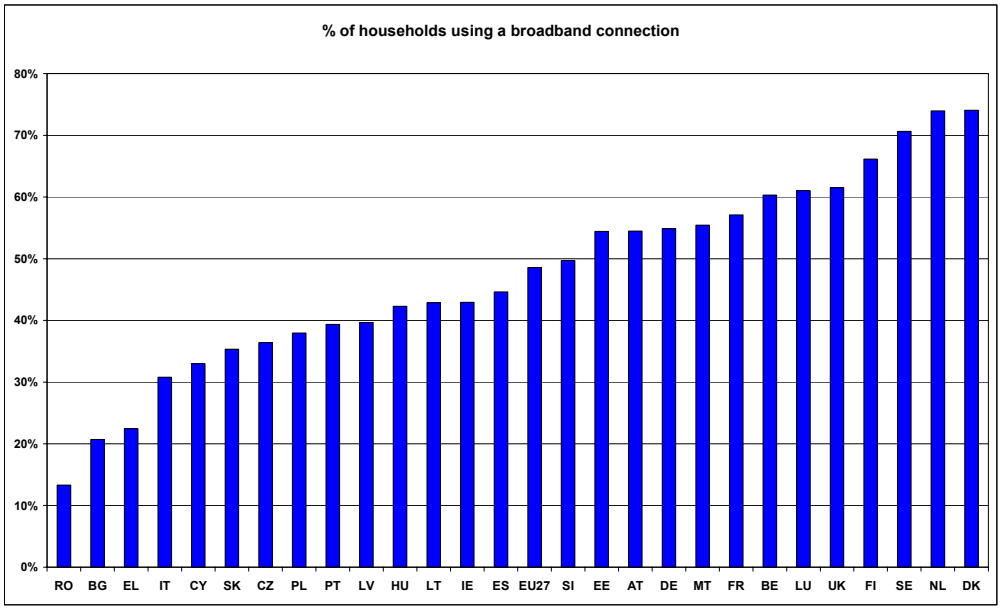


The Netherlands on the other hand has the second highest penetration rate in the EU but still experienced an increase in the number of lines of 1.5 percentage points, slightly below the EU average. France and Germany, which together account for 35.9% of the EU broadband

[25] Number of fixed broadband lines per 100 population

market, also saw a close to 3 percentage point increase in fixed broadband subscribers. Hence it appears that there is yet some margin for growth in the broadband market. Data on household take up, a good proxy for the growth potential of broadband markets, suggest that there are yet a high proportion of EU households that do not have a broadband connection. In the Netherlands and Denmark around 25% of households do not have a connection, but on average more than 50% of households are not yet connected to broadband (Figure 15).

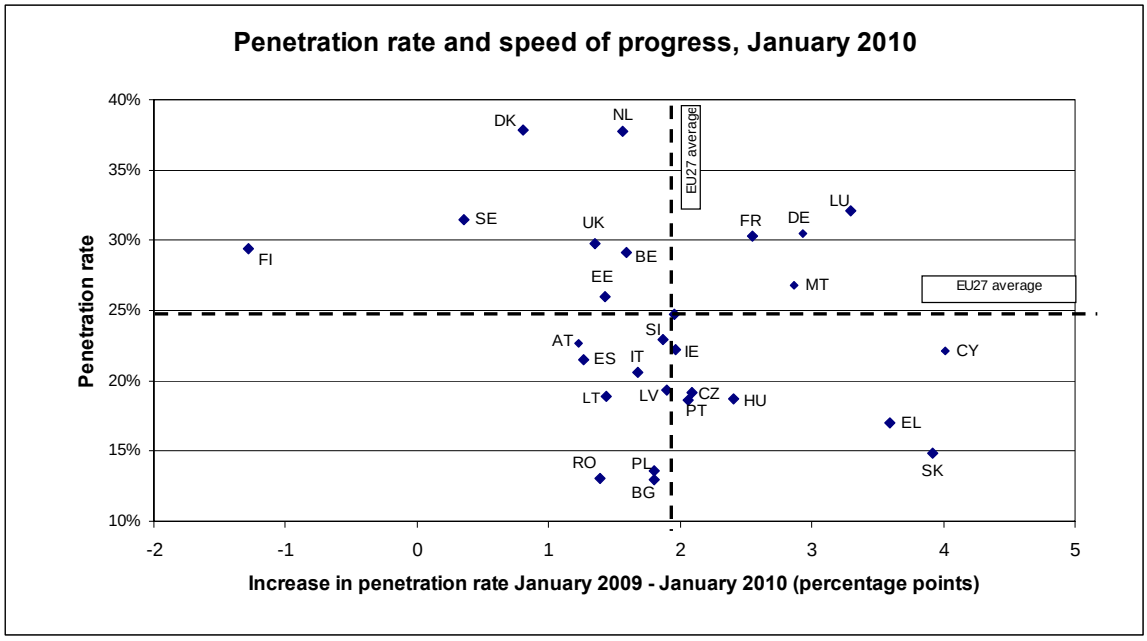
Figure 15



Source: Eurostat Community Survey on ICT usage by Households and Individuals (2009)

Growth in countries where broadband markets are far from being mature also shows a mixed picture. Cyprus had the highest year-on-year increase in fixed broadband lines (4 percentage points). Slovakia and Greece, which have penetration rates below average, have also displayed higher growth rates and are thus catching-up with the EU average. However, Austria, Spain, Romania, Lithuania, Italy, Poland, Bulgaria, Slovenia and Latvia only had growth rates between 1 to 2 percentage points, failing to catch up and falling further behind the EU average (Figure 16).

Figure 16



The impact of the economic slowdown in 2009 on the broadband market is mixed. EU GDP declined by 4.2%[26] in 2009 compared with 2008 whereas fixed broadband lines grew by 9% (January 2009-January 2010). While the fixed broadband market in some countries with stronger than average GDP decline (Slovakia, Greece, Hungary, Czech Republic and Germany) grew faster than in the EU, countries such as Belgium, Spain, Austria, Poland and Italy lagged behind the average broadband growth despite lower than the EU average GDP decline.

Despite these disparities, the broadband gap, i.e. the difference between the highest and the lowest level of penetration, was 24.8 percentage points in January 2010, 1.6 percentage points lower than in 2009 and continues to fall. Growth in mobile broadband has been significant in a number of EU countries in 2009. Although the penetration of dedicated mobile broadband cards was limited to 5.2% of EU population in January 2010, the mobile broadband market is growing rapidly (the penetration rate was 2.8% in January 2009). In six Member States (Finland, Portugal, Austria, Sweden, Ireland and Denmark) the penetration rate exceeds 10%. The estimated number of dedicated mobile broadband cards (25.1 million) represents about 20% of all fixed broadband connections, up from 10% in 2008.

International comparison

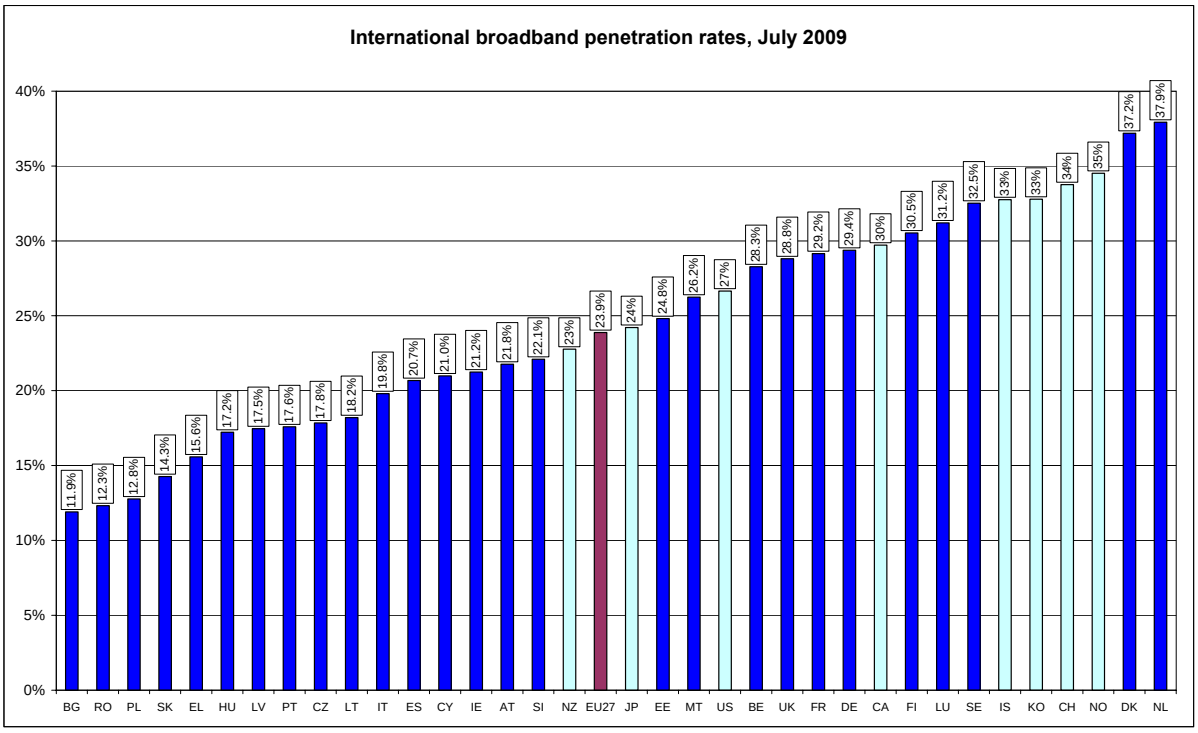
In 2009, the EU continued to be the largest broadband market in the world and some EU Member States enjoy the highest penetration levels. In terms of ranking there have not been any significant changes since 2008: The Netherlands and Denmark continue to be the best performers, followed by Sweden, Finland and Luxembourg, which had penetration levels

[26] Source:EUROSTAT, http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tsieb020

above 30% of the population, along with a group of four non-EU countries, Norway, Switzerland, Korea and Iceland (Figure 17).

The EU was catching up with the US in broadband take-up. The gap in penetration rates declined to 2.8 percentage points in July 2009[27], from 3.4 points in July 2008. The US broadband market grew by 8.2% (compared with 10.6% in the EU) between July 2008 and July 2009 to reach a penetration level of 26.7%. This may be partly explained by the greater impact of the economic slowdown in the US, as well as the fact that the US market is more mature than the European.

Figure 17



At the global level, growth in the broadband market was driven by strong increases in developing markets. The total number of broadband subscriptions was estimated to be around 440 million[28] at the end of July 2009, with a year-on-year growth rate of 16%. Among the largest broadband markets, China, Russia, Mexico, India and Vietnam experienced the biggest increases in broadband subscriptions, thereby reducing the proportion of EU lines in the global total.

Growth rates in developing countries (India 62%, China 23%, Russia 39%, Brazil 23%, Mexico 54%) outpaced the levels of developed countries, clearly from much lower levels of penetration. Many EU operators have been very active in these growing markets.

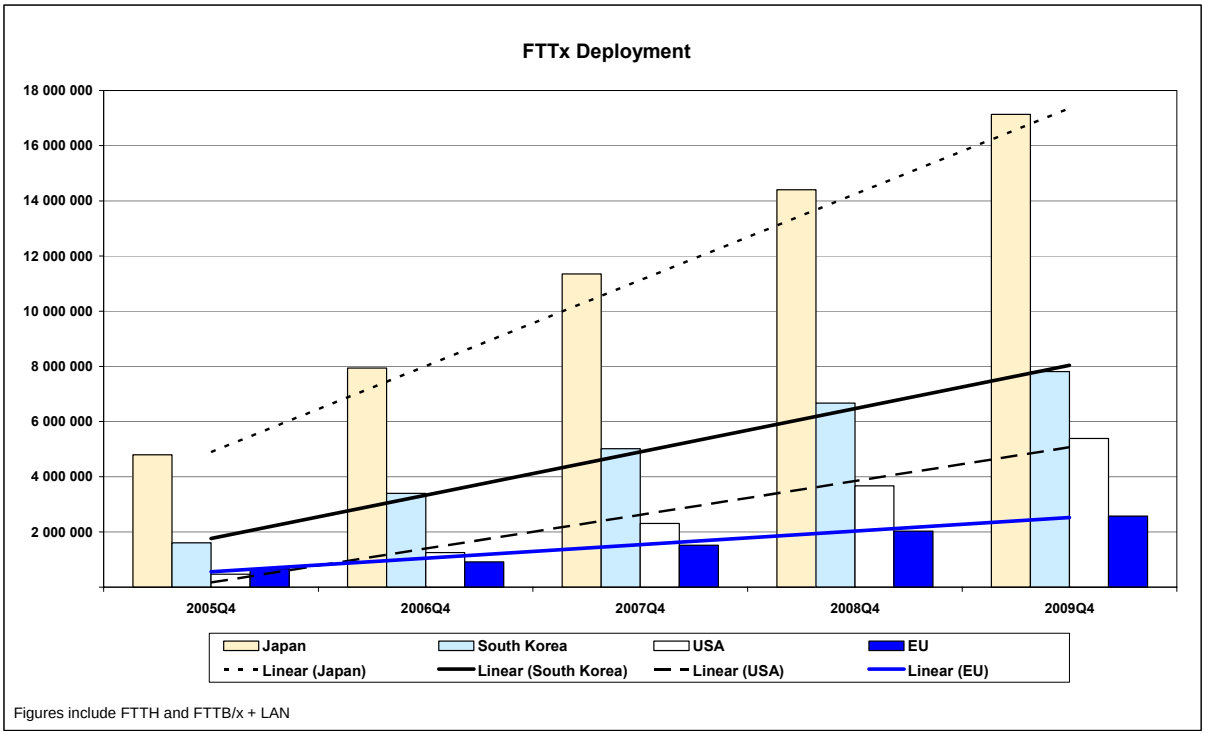
Despite the good penetration rate levels, most of the EU broadband lines are based on xDSL technologies and average speeds are usually lower than in other developed countries with high broadband penetration rates. Lines based on fibre to the home (FTTH) solutions and fibre + LAN only represent between 1.8 and 5% of all broadband lines, while this share is much

27 OECD data for January 2010 are not available

28 EC services based on different sources (Informa, Point Topic)

higher in countries such as Japan (51.4%) or Korea (46%). In the US, FTTH lines represent 6% of all broadband lines. Although FTTH deployment has accelerated in 2009 (Figure 18) differences are still very apparent. Price levels also reflect these differences. In October 2009 broadband standalone access at 100 Mbps was available at around 30 euros per month in Japan and 20 euros in Korea. These prices are between 20 and 50% lower than prices for similar products in those EU countries where these are available.

Figure 18



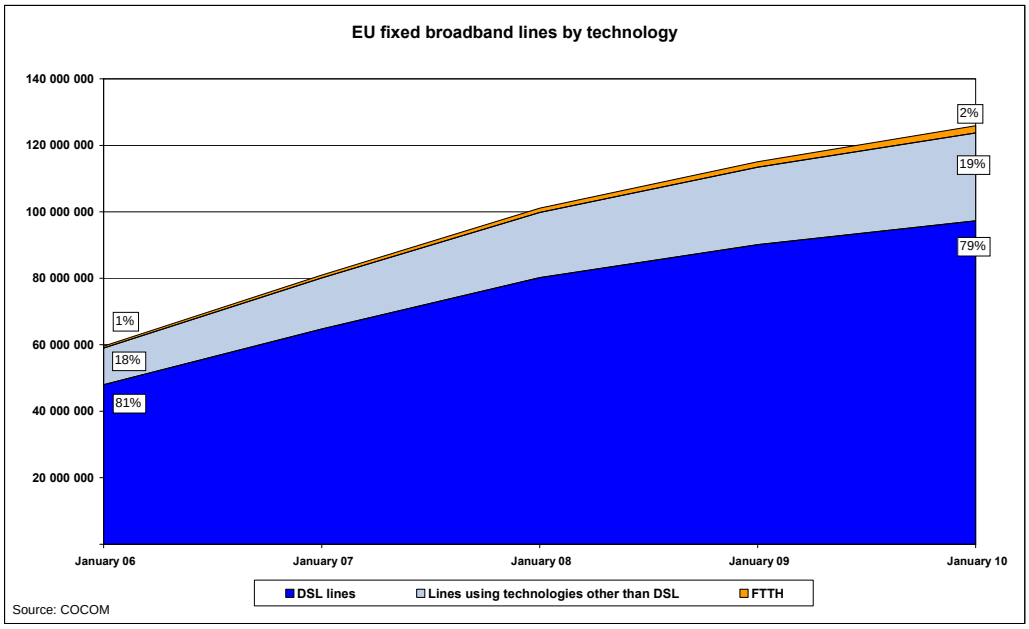
The pattern of high-capacity broadband deployment is different in advanced markets compared to emerging ones. In Japan, US, South Korea and Taiwan it appears that growth is being largely driven by operators' efforts to persuade DSL and cable subscribers to switch to FTTx, whereas in the less developed markets such as Russia and China, large numbers of first-time broadband customers have signed up to FTTx, often because it is the only technology available to them. This pattern may enable currently less developed markets to leapfrog the advanced broadband economies in the future.

Market developments - the emergence of fibre and mobile broadband

DSL continues to dominate the EU broadband market, although its share of the market has slightly decreased to 79% from the peak of 81% in January 2006 (Figure 19). In the period between January 2009 and January 2010, 70% of the new lines were provided by means of xDSL technologies, while 30% were connections using other types of technologies, featuring a 3 percentage point increase in the number of access lines by other means compared to the year before.

In the fixed broadband market, the largest relative growth was experienced by broadband lines based on fibre to the home and fibre + LAN, which altogether increased by 26%, admittedly from a lower base than DSL or cable modem lines, technologies that showed an increased of around 8%.

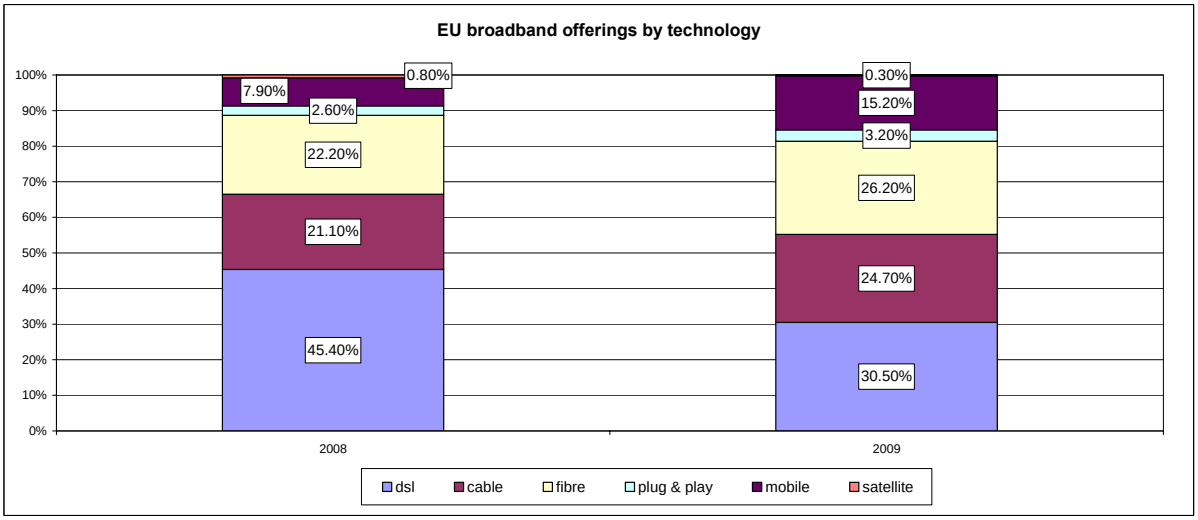
Figure 19



Most operators have expanded the number of broadband products based on fibre. Of a sample of 2,700 broadband products offered by the largest and most representative operators in the EU Member States in October 2009, 26% of them are based on fibre technologies[29], 4 percentage points up on 2008 (Figure 20). Products based on cable modem also experienced a significant increase. Availability of high-speed, fibre-based products is still limited to some parts of major urban areas and new offerings are often used by operators to assess consumers' interest in switching to upgraded broadband access.

Despite the above, the highest growth occurred in the mobile broadband market, where take up increased by 115% (January 09-January 10). The number of new mobile broadband products offered by mobile operators also doubled in 2009.

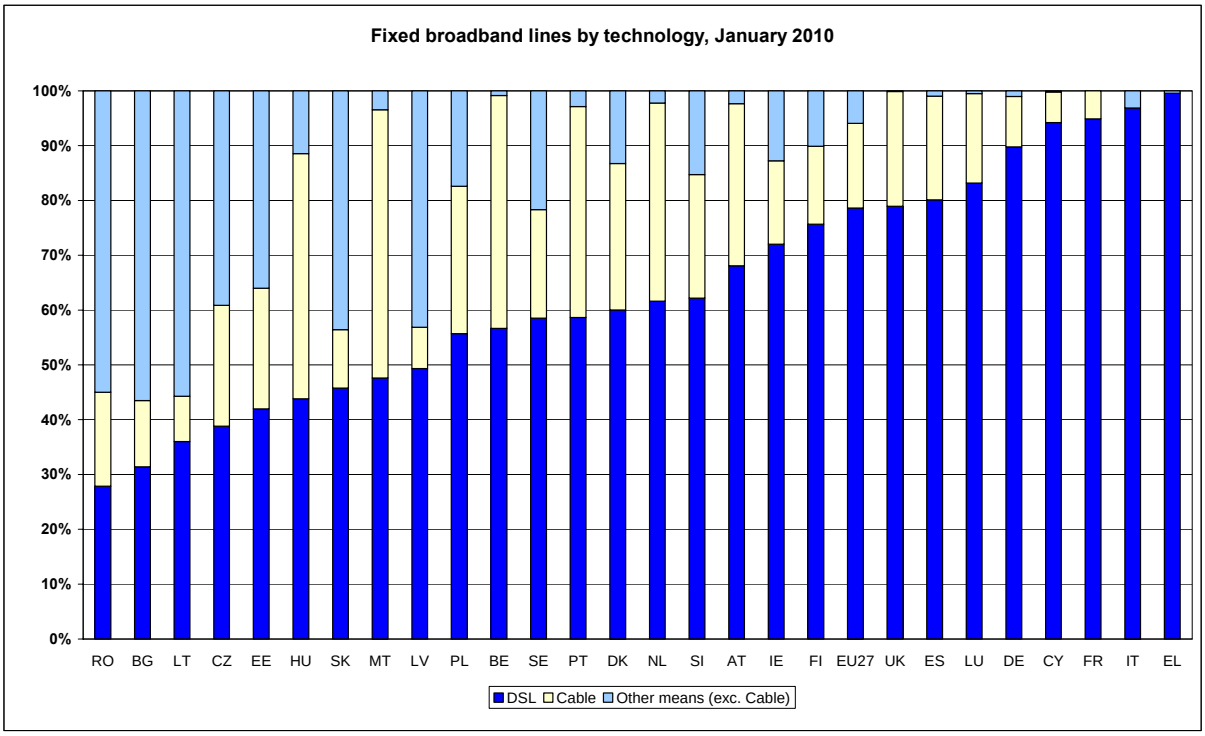
Figure 20



29 Van Dijk, "Broadband Internet Access Costs", a study for the European Commission

Some countries show completely different patterns in their choice of broadband technologies, especially Member States where the lack of legacy infrastructure has triggered investment in other technologies. In Romania, Bulgaria and Lithuania and, to a lesser extent, in Estonia, Latvia, Slovakia and the Czech Republic, the deployment of fixed broadband lines is very much based on fibre access (Figure 21).

Figure 21

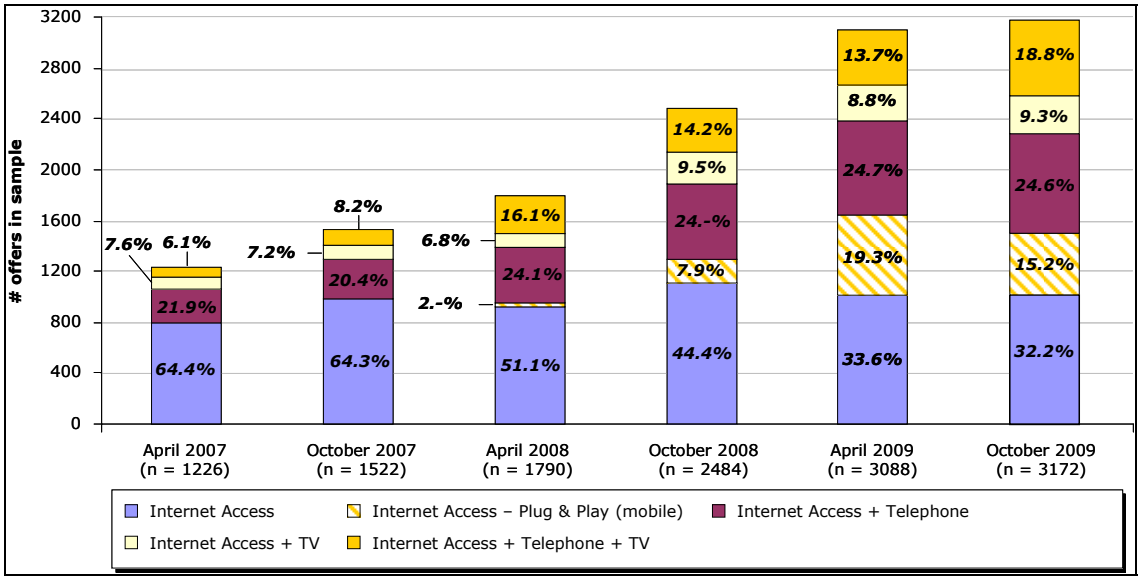


Despite this higher proportion of FTTx lines in these Member States, it seems that actual speeds provided by these fibre access lines are in many cases comparable or even lower than ADSL2+ speeds[30].

The slowdown in the growth of broadband subscriptions experienced in 2009 was accompanied by some price reductions, or speed increases for the same price, in broadband products as well as by a rise in the number of bundled offers which often have the benefit of putting a cap on the retail prices but risk locking in customers and reducing churn. As of October 2009, it is estimated that almost 68% of broadband products offered by the largest broadband operators consisted of bundles of services, broadband combined with telephone being the largest one (Figure 22). In April 2007 bundled services constituted only 36% of operators' offerings. More and more consumers perceive bundles as a way to reduce spending in communications services.

30 Informa's Telecom Markets, Issue no. 597, September 2009

Figure 22



In 2009 there was a wide debate about the transition to next generation access networks although in reality the market has been very cautious about the move.

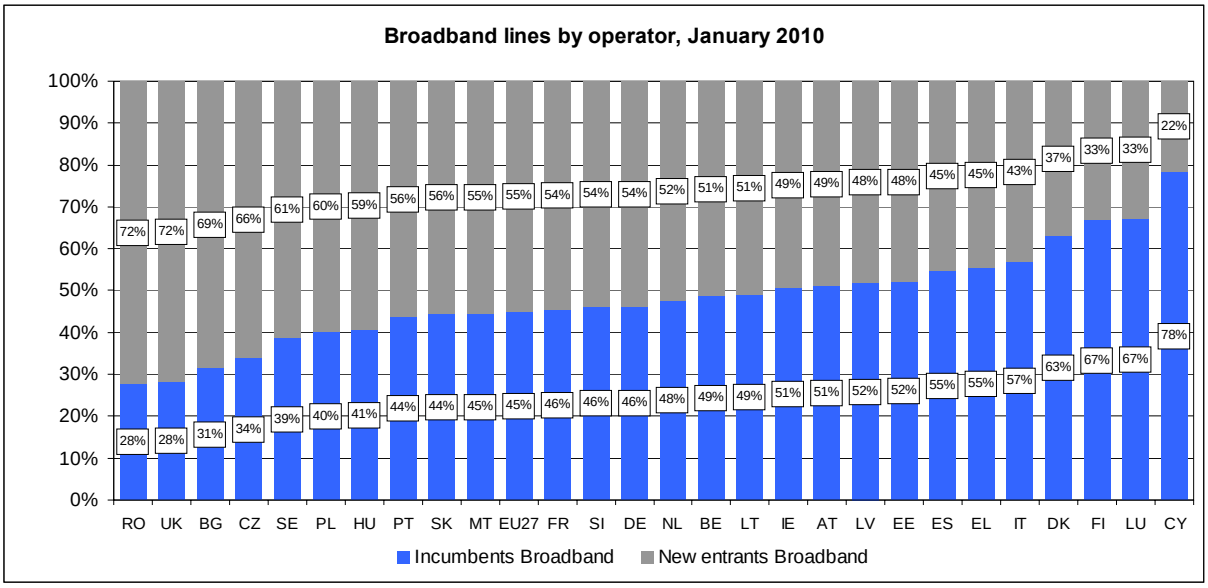
Many operators blame uncertainty surrounding regulatory approaches to NGN and uncertainty as to demand, as currently only a fraction of consumers use 80% or more of the network capacity available to them. Hence, it appears that only a few customers would be willing to pay a premium for very fast broadband when other speeds at lower prices are available and fit the current needs of most broadband users. In a flat rate based IP environment, an increase in traffic does not automatically translate into an increase in revenues. This has an impact on operators' profitability and their capacity to invest in expanding their networks capacity. Operators are searching for new and sustainable business models also by diverting some operations into applications, services and content.

Competition stagnates in the DSL market

The market share[31] of the incumbent fixed operators since July 2003 has followed a downward trend which is now stabilising around 45% of the broadband market and in some cases the incumbents are regaining market share. The decline in incumbents' market share in 2009 has been the lowest since data are collected, 0.5 percentage points only, compared to 0.6 and 0.8 percentage point drops in the past 2 years and losses of between 3 and 4 points in previous years. In most of the largest EU Member States incumbents still control a large share of the market (Figure 23), affecting the EU average (Italy 57%, Spain 55%, Germany 46%; France 46%, Poland 40%).

31 Based on subscribers

Figure 23

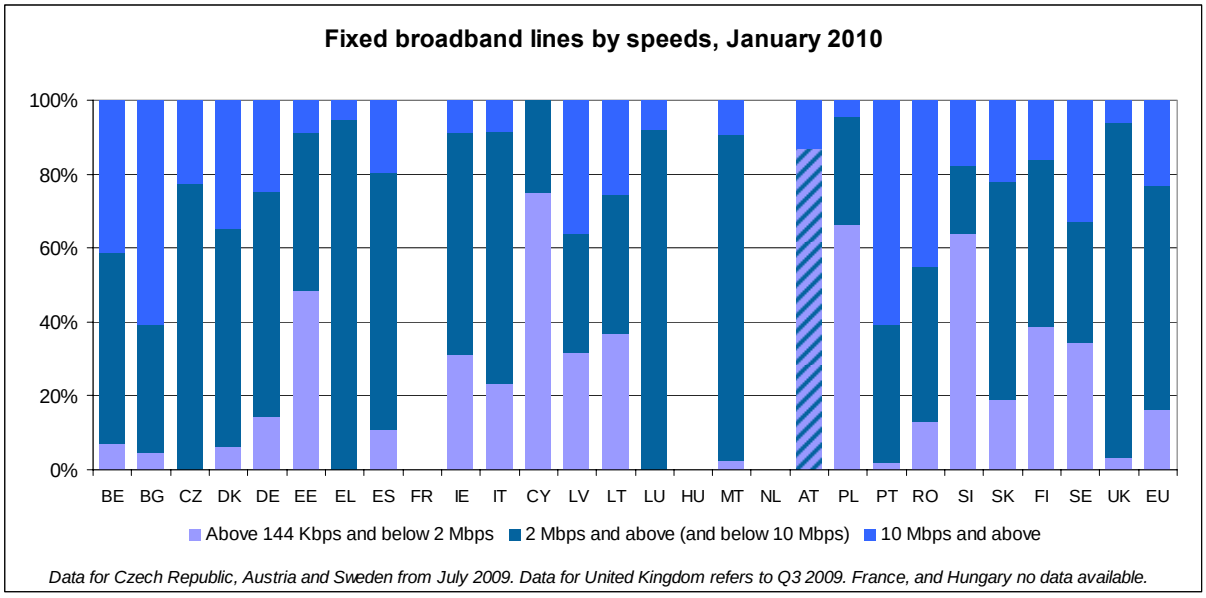


The UK is the exception and the incumbent in this country has the lowest market share of all EU Member States after Romania. However, in 2009, the incumbent operator in the UK gained some market share. Incumbent operators have also gained market share in Denmark, Latvia, Austria and Finland. They have also gained share in Belgium, Bulgaria, Czech Republic, Malta, Portugal and Romania, countries in which the incumbents' market share is below 50%.

A shift in broadband speeds and a slight fall in prices

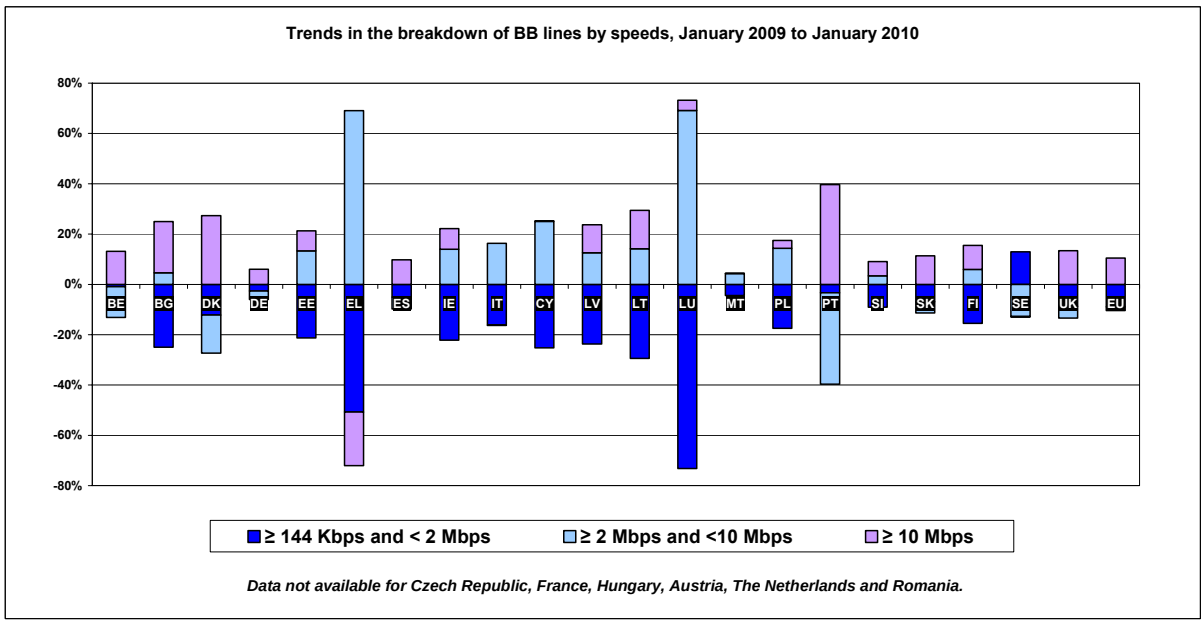
As of January 2010 two thirds of fixed broadband lines in the EU offered speeds between 2 and 10 Mbps (Figure 24). The most significant development is the shift in the two other category of lines: Low speed broadband lines with download rates between 144 Kbps and 2 Mbps only represent 16% of all fixed broadband lines in January 2010, down from 25% in 2009, while the fastest category of lines (10 Mbps and above) has increased its share, from 14% in January 2009 to 23% of all fixed broadband lines in January 2010.

Figure 24



Therefore, while on average the increase in broadband speeds is not significant yet, there is a clear trend towards faster access lines. In terms of volume, the large majority of fixed broadband net additions in 2009 occurred in the range of 10+ Mbps speeds and most EU countries experienced a reduction in the proportion of low speed fixed broadband lines (Figure 25).

Figure 25

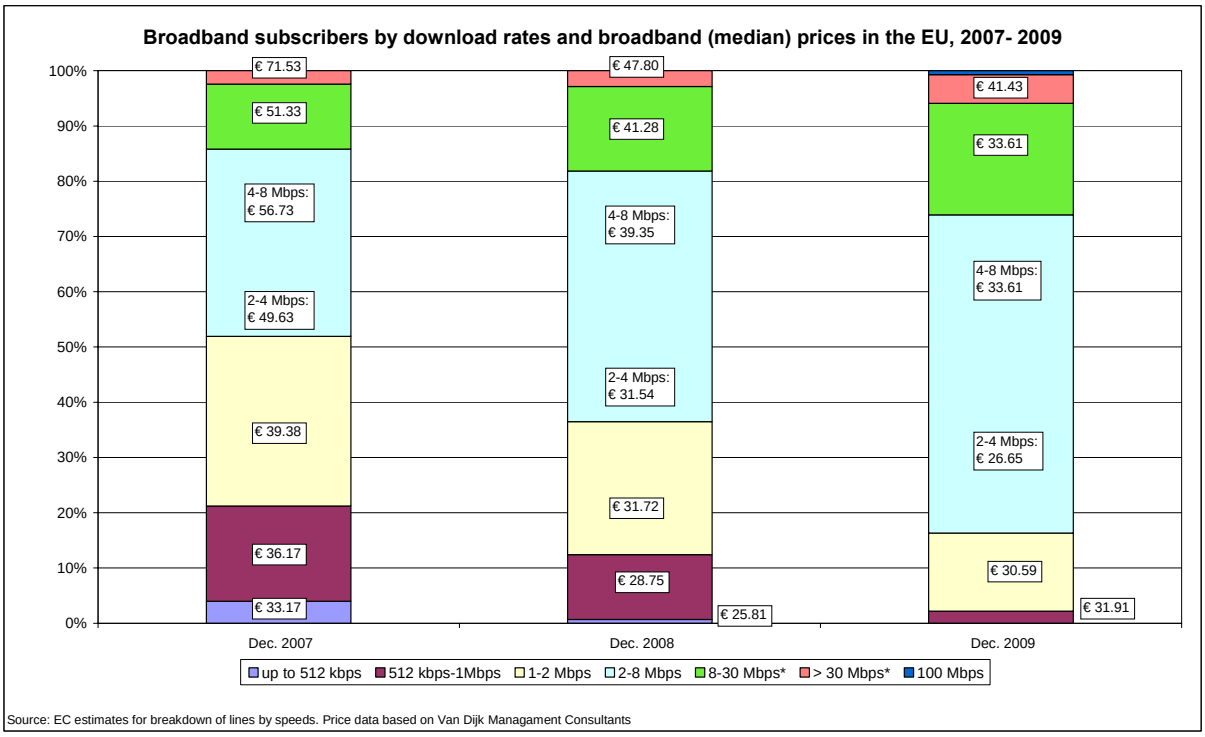


The raise in the number of high speed broadband lines follows the major increase in the number of high speed fixed broadband offers. Between October 2008 and 2009, the number of broadband products (broadband standalone and bundles) with speeds higher than 20 Mbps doubled, thus becoming the category of lines with the highest number of offers in the EU. Products with speeds greater than 20 Mbps represent 33% of all products commercialised by

broadband operators. Lines of speeds between 8 and 20 Mbps follow with 23%. Offerings with speeds between 2 and 8 Mbps, which represent the bulk of the active broadband lines in the EU, only account for 23% of all broadband products.

With regard to broadband retail prices, the median of price offers with download speeds between 2 and 4 Mbps in the EU 27 countries slightly decreased in 2009 (Figure 26). For broadband lines with speeds between 4 and 8 Mbps, it appears that prices decreased significantly in the newer Member States, while they remained more stable in the rest of the EU.

Figure 26



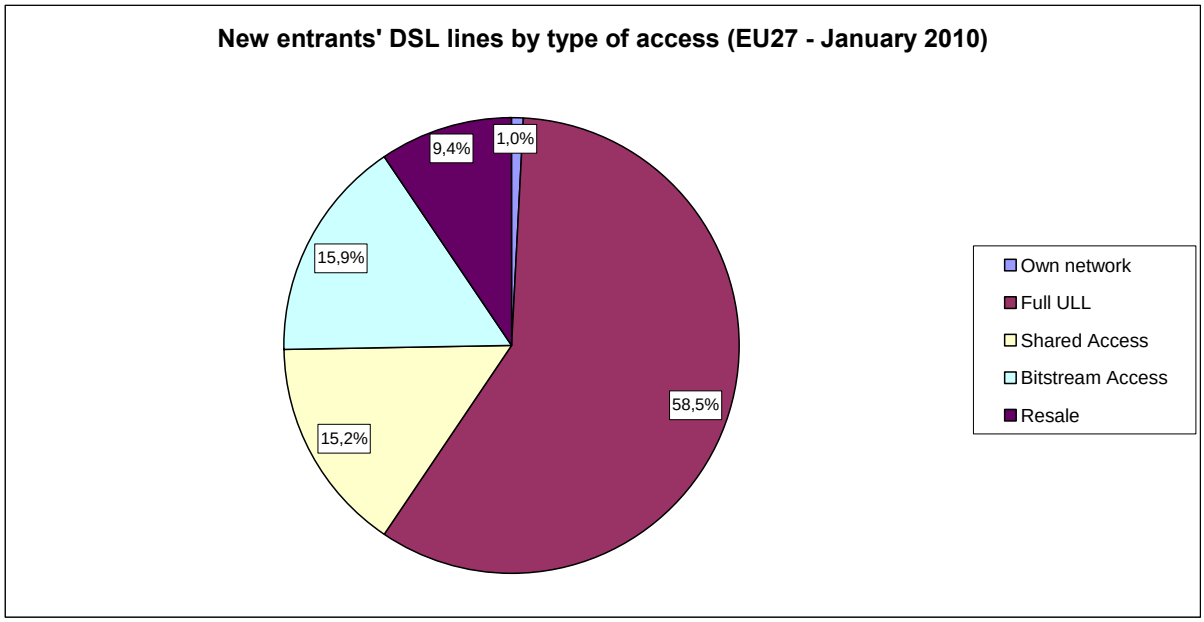
Source: EC estimates for breakdown of lines by speeds. Price data based on Van Dijk Managament Consultants

The DSL market is stabilising

Market shares

Local loop unbundling (fully unbundled lines and shared access) has recorded positive growth and has become the main form of wholesale access for new entrants with 73.7% of DSL lines, up from 69.2% in January 2009 (Figure 27). New entrants' use of bitstream access for local loop unbundling in the provision of broadband services remained stable (its share went down by 1 percentage point only since January 2009). The share of lines based on resale, which represents a type of access for low-investment intensive new entrants, has shrunk by 3.5 percentage points during the last year.

Figure 27



Resale is used only in a limited number of Member States (especially the UK, Germany and Luxembourg but also Belgium, Sweden, Denmark, the Netherlands and Spain), and in almost all countries LLU or bitstream are the predominant means of access. The EU average hides wide differences between EU Member States, which reflect diverse regulatory approaches in the broadband wholesale market.

For example, in the cases of Bulgaria, Romania and the Czech Republic, the broadband market follows completely different patterns. In the first two countries, due to the absence of legacy infrastructure based on PSTN, competition is based on cable modem networks and in local new networks, based on fibre + LAN. DSL lines only represent around 30% of all broadband retail lines and new entrants do not rent almost any PSTN lines from the incumbent. In the Czech Republic, only 39% of broadband lines are based on DSL, with a clear predominance of fixed wireless access and cable modem. Alternative operators only rent 5% of all fixed broadband lines from the incumbent operator. Similar situations occur in Latvia, Lithuania, Estonia, Slovakia and Malta, where the incumbent operator fully, or almost fully, controls the DSL market (Table 3). With the exception of Slovakia, in none of these countries is DSL the predominant technology.

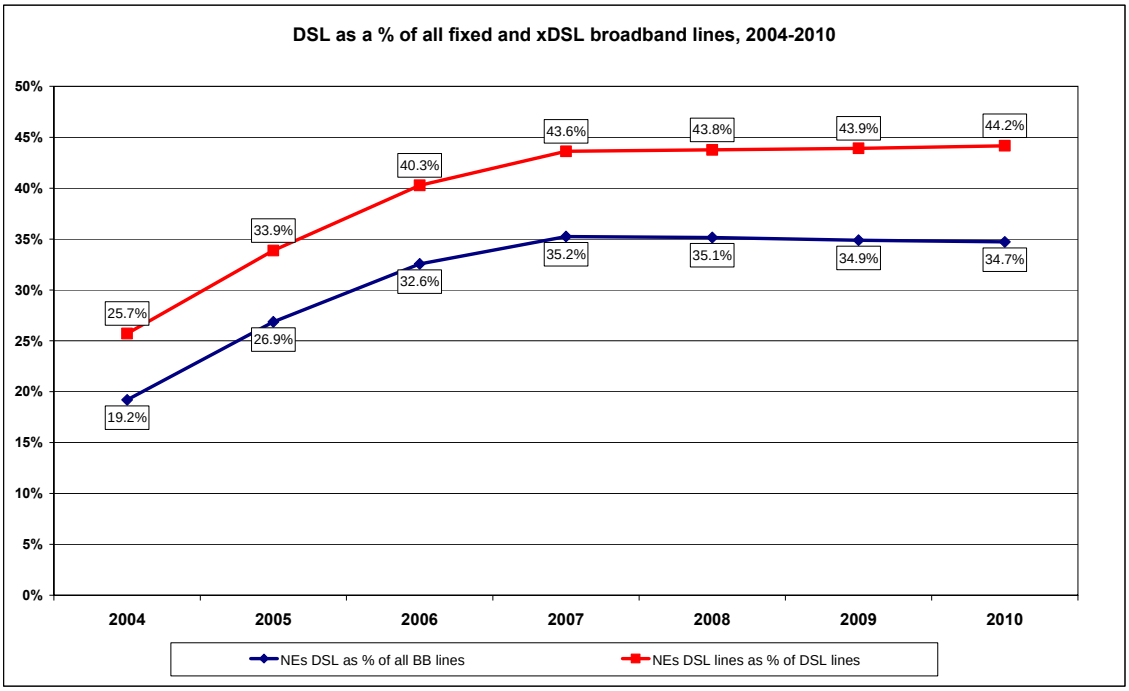
Table 3

Country	NEs DSL as % of all fixed broadband lines	NEs DSL lines as % of all DSL lines	DSL as % of all fixed broadband lines
BG	0%	0%	31%
RO	0%	0%	28%
LV	0%	0%	49%
LT	0%	1%	36%
EE	2%	6%	42%
MT	3%	6%	48%
SK	4%	8%	46%
CZ	5%	13%	39%
BE	8%	14%	57%
HU	10%	23%	44%
PL	16%	28%	56%
CY	16%	17%	94%
PT	16%	27%	59%
NL	16%	26%	62%
DK	16%	27%	60%
LU	17%	20%	83%
AT	17%	25%	68%
SI	21%	34%	62%
IE	23%	31%	72%
SE	23%	39%	59%
FI	24%	32%	76%
ES	26%	32%	80%
EU27	35%	44%	79%
IT	40%	41%	97%
DE	44%	49%	90%
EL	44%	44%	100%
FR	49%	52%	95%
UK	51%	64%	79%

Along with platform based competition, effective sector regulation has been a key factor in driving competition, in particular in those countries where DSL is a predominant technology. Sector regulation has fostered competition and growth in the DSL market and consequently a significant lift in the broadband market. However, in the last three years, the share of new entrants' DSL retail lines has only increased by 0.6 percentage points at EU level (Figure 28), which is a major change compared to previous years. In many countries, the growth of new entrants' DSL lines was flat or even negative. This can be partly interpreted as a result of the small contraction of the DSL market, the maturity of some markets and the (albeit small) increase in the relative size of lines based on new technologies, where new entrants have been

more active. Although new entrants have continued investing in the DSL wholesale market (growth in LLU products is still significant), the DSL retail market has somehow stabilised and major shifts in market shares are no longer expected.

Figure 28



LLU pricing

Decreases in LLU prices in 2009 were not significant compared to the reductions seen in 2008. On average, prices for fully unbundled lines only decreased by 1.8%, while prices for shared access declined by 5.1%. These reductions are similar to the 2007 levels.

There were slight increases in the price of LLU in Denmark, Italy, Cyprus, Finland, Sweden and the UK. Prices did not experience any change in Belgium, Bulgaria, Ireland, Latvia, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania and Slovenia. In all other countries prices of fully unbundled lines decreased.

With regards to shared access lines, prices went up in Denmark, Finland, Sweden and the UK, and remained constant in Belgium, Bulgaria, Germany, Estonia, Ireland, France, Cyprus, Latvia, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania and Slovenia.

State Aid in the Broadband market

In 2009, spurred on by the economic crisis, there was considerable interest in public funding of broadband deployment, as several recovery packages (including the EU's) regarded broadband as an important instrument to foster sustainable economic growth. In order to provide legal certainty to undertake public support for broadband as well as for high-capacity broadband (Next Generation Access) in under-served areas, the Commission adopted Guidelines on 17 September 2009 which outline how public funding can be provided for broadband in line with EU state aid rules.

These Guidelines explain how public funds can be channelled for the deployment of basic broadband networks (e.g. upgrade of legacy networks-copper) as well as of Next Generation Access ("NGA" – mainly fibre based new architectures) to areas where private operators do not intend to invest.

The primary objective is to foster a wide and rapid roll-out of broadband networks while at the same time preserving the market dynamics and competition in a sector that is fully liberalised and subject to ex-ante regulation. The Guidelines also ensure that whenever state aid is granted to private operators, the aid must foster competition by requiring the beneficiary to provide open access to the publicly funded network for third party operators.

The Guidelines also contain specific provisions concerning the deployment of Next Generation Access networks, allowing public support to foster investment in this strategic sector without creating undue distortions of competition.

The distinction between different areas in terms of competition is adapted to the situation of NGA networks (whose deployment, as signalled before, is still at an early stage). They require Member States to take into account not only existing NGA infrastructures but also concrete investment plans by operators to deploy such networks in the near future. A number of crucial safeguards (such as detailed mapping, open tender, open access obligation or technological neutrality and claw-back mechanisms) are laid down in order to promote competition and avoid the 'crowding out' of private investment.

In 2009 the European Commission took 12 decisions regarding broadband projects involving public funding. 11 of these were found to be compatible with the Treaty (article 4(3) decision types), while one was not considered aid but rather a Service of General Economic Interest[32].

The total amount of the aid approved was €467 million.

Table 4.

#	Decision name	MS	Decision Date	Decision type
1	N 238/2008 - DE - Broadband infrastructure development	DE	23/02/2009	Article 4(3)
2	N153/2009 - DE - Amendment of the State aid broadband scheme N266/2008	DE	19/05/2009	Article 4(3)
3	N183/2009 - LT - RAIN project	LT	17/07/2009	Article 4(3)
4	N243/09 - DE - Extension of broadband coverage in Niedersachsen	DE	14/08/2009	Article 4(3)
5	N 331 2008 Réseau à très haut débit en Hauts-de-Seine	FR	30/09/2009	Article 4(2)
6	N172/2009 - SL - Broadband development in Slovenia	SI	19/10/2009	Article 4(3)

[32] N 331 2008 Réseau à très haut débit en Hauts-de-Seine

7	N418/2009 - UK - Northern Ireland	UK	5/11/2009	Article 4(3)
8	N 388/2009 – FI - High-speed broadband pilot projects in Finland	FI	not yet	Article 4(3)
9	N 607/2009 - IE - Rural Broadband Scheme	IE	4/12/2009	Article 4(3)
10	N 423 2009- CY -Cyprus Broadband	CY	not yet	Article 4(3)
11	N 323 2009 - ES - Broadband Asturias	ES	not yet	Article 4(3)
12	N368/2009 Amendment of the State aid broadband scheme N115/2008	DE	not yet	Article 4(3)

Investments in the deployment of high speed broadband networks were also being financed by the European Investment Bank. In particular, alternative operators in Italy, Germany, Portugal and France used the Bank to finance the upgrading of their networks and the roll-out of next generation fibre networks. According to the Commission, these projects are likely to foster the development of competition and advanced electronic communications services.

FIXED VOICE TELEPHONY

Traditional fixed voice telephony services are increasingly being replaced by mobile solutions and Voice over Broadband[33]. At times offered for free as a marketing tool, the service is increasingly accessible within broadband bundles and no longer attracts significant new entry or investment as a standalone service. Over recent years fixed voice telephony retail and wholesale prices as well as market shares have not varied to any significant extent. There even seems to be a slight increase in the market shares of the incumbents for some segments and also in the retail prices. EU average incumbent fixed interconnection rates remained stable with very slight declines over the last year.

Fixed voice telephony declines both in terms of revenues and volumes

Fixed telephony traffic, measured in million of voice minutes, continues to decline,- by 7% in 2008 and around 30% since 2005 (Figures 29a 29b). Regarding revenues, while fixed voice telephony still drives 30% of the total revenues of the telecom sector, its share has been declining constantly over time. With the introduction of bundles, regulators experience difficulties in collecting data for the different segments of the voice telephony market (local, national, international) as some operators no longer make this distinction. Moreover, operators offering quadruple-play do not clearly distinguish between revenues coming from fixed voice, mobile voice and other services.

[33] Including IP telephony similar to PATS (Publicly Available Telephony Service) and Pc-to-Pc services.

Figure 29a

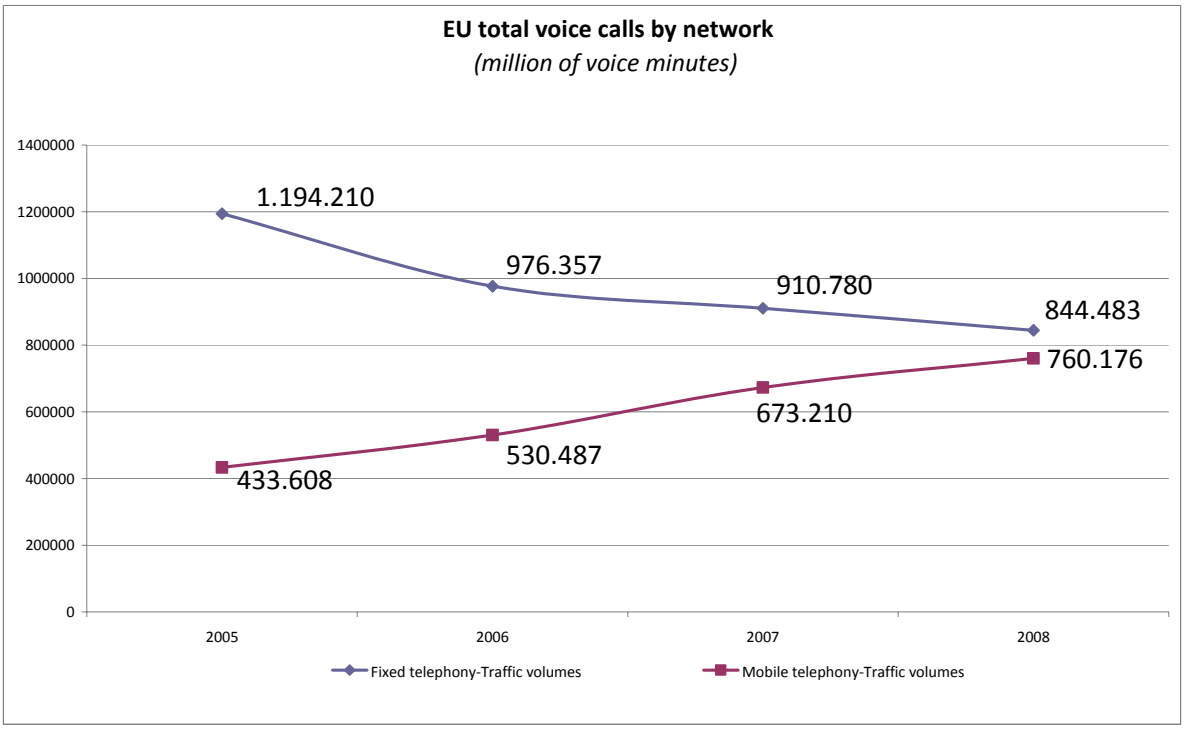
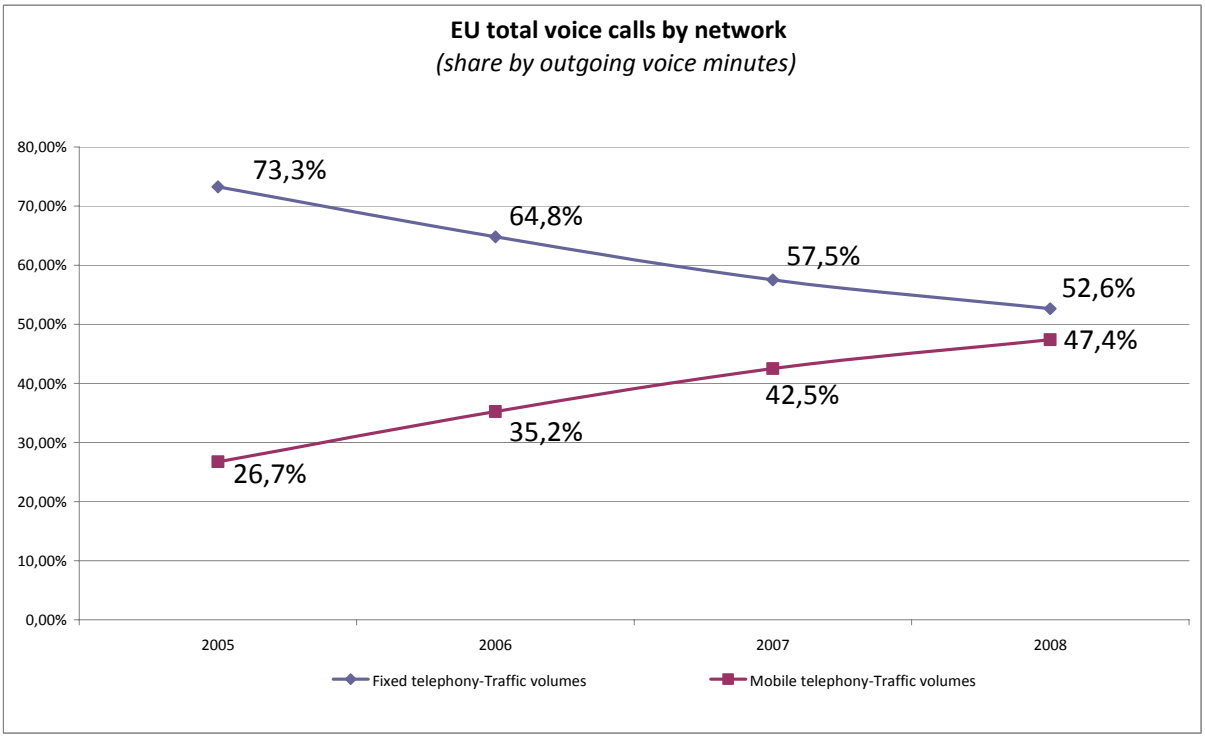


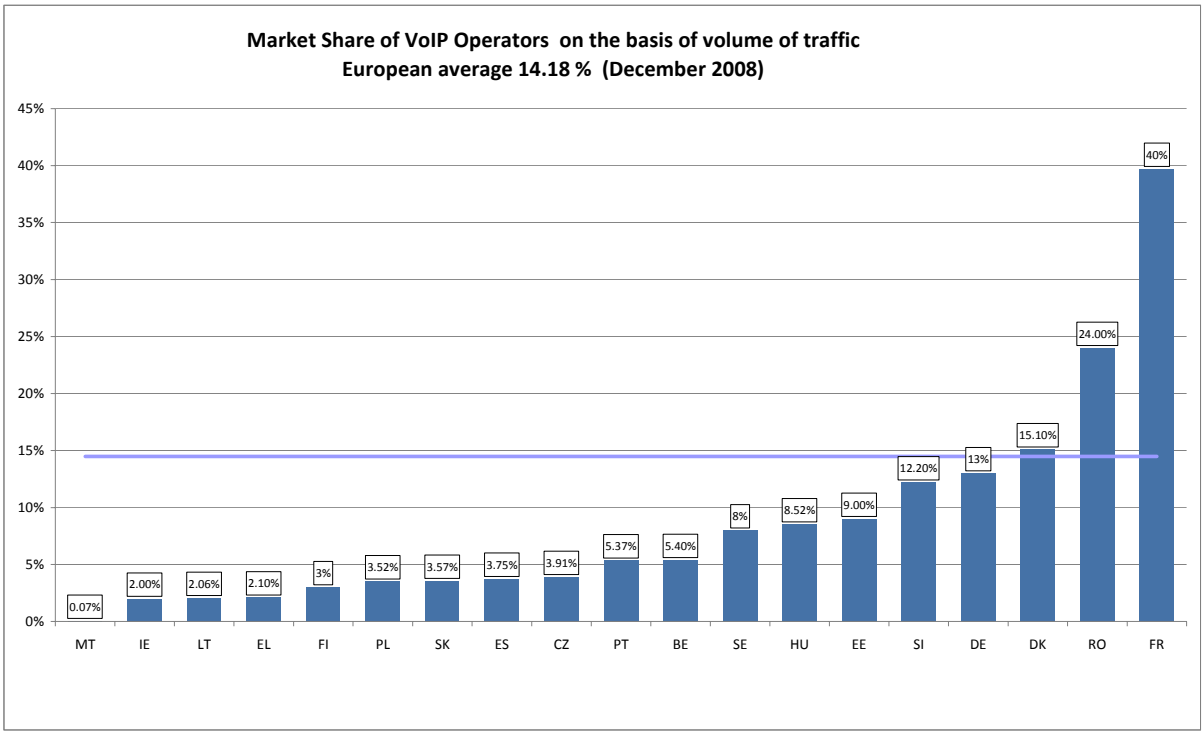
Figure 29b



The increase in bundles and VoIP

While the traditional fixed telephony services decline, managed VoIP[34] services continue to increase. At the end of 2008, the market share of VoIP operators on the basis of traffic represented 14% of the fixed telephony market (a 78% increase compared to 2007) (Figure 30).

Figure 30



As noted above, fixed voice telephony services are increasingly offered within bundles. For example, while in October 2007 64% of the broadband offers[35] in Europe were standalone (broadband only, without other services like voice), in October 2009 only 32% were standalone.

The pattern of competition

The fixed market remains very concentrated in some Member States.[36] The Herfindahl Index[37], an indicator of market concentration, is very high, in particular in Bulgaria, Cyprus, Lithuania, Malta, Slovenia and Finland (Figure 31).

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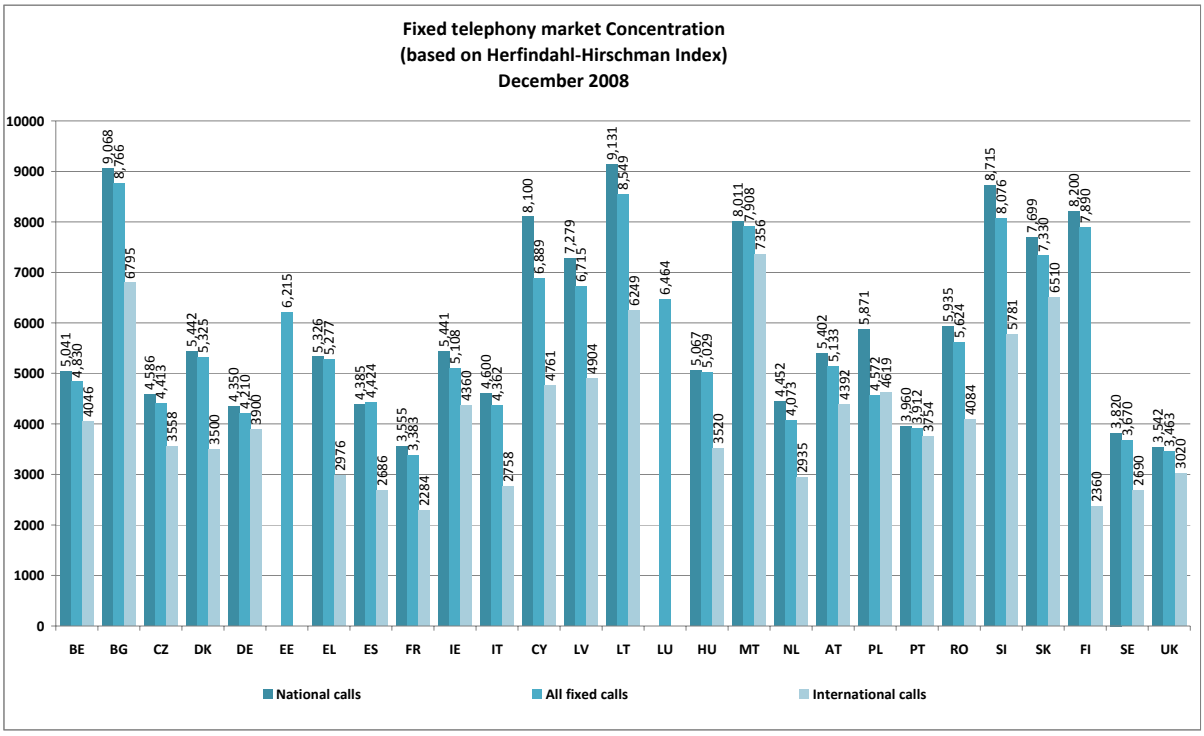
34 Managed VOIP operator' means an operator providing a publicly available telephone service (PATS) using voice over internet protocol technology (VoiP), whereby the operator controls the quality of service provided though an IP network, at a speed over 128 kbit/sec. Unmanaged voice and 'peer to peer' services are not be included.

35 Van Dijk, "Broadband Internet Access Costs", a study for the European Commission, October 2009. These results include mobile broadband offers.

36 In search for profitability, alternative operators progressively enter the fixed broadband market and not the voice telephony market alone.

37 Sum of the square roots of the market shares of the operators on a given market.

Figure 31[38]

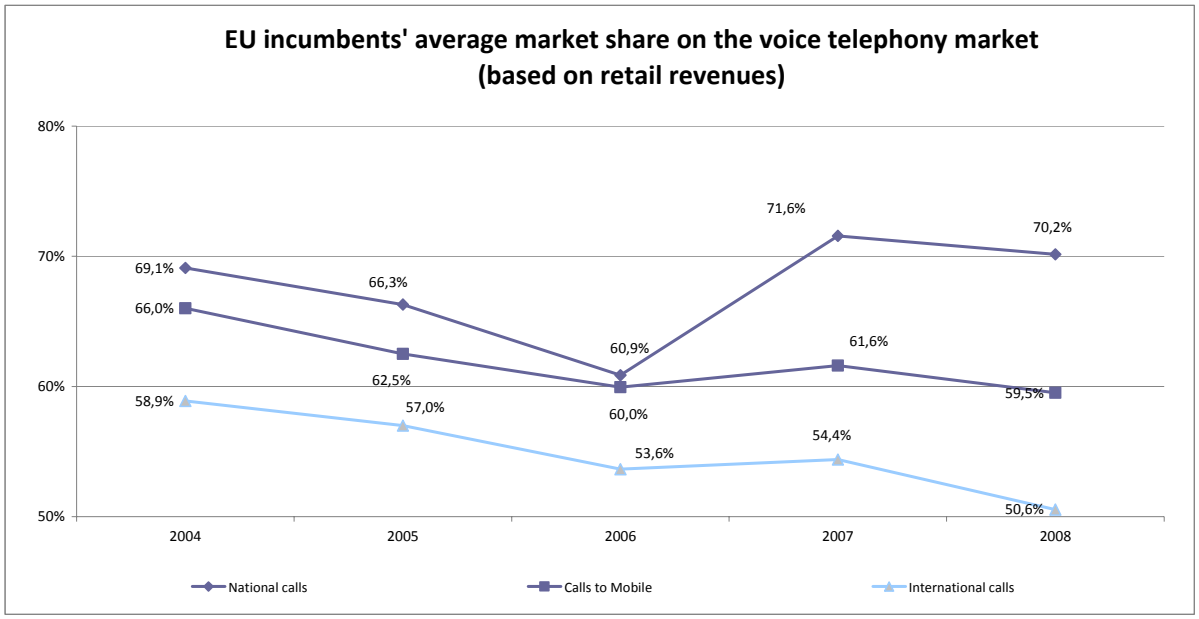


Market share

Incumbents' market shares for national calls have grown in the EU between 2006 and 2008 (+16%) (Figure 32). On the other hand, the market share of calls to mobile remained stable at around 60%, while the incumbent market share in the international calls segment has continued to decrease (-7% between July 2007 and July 2008). The international fixed calls market is still the most competitive fixed telephony market.

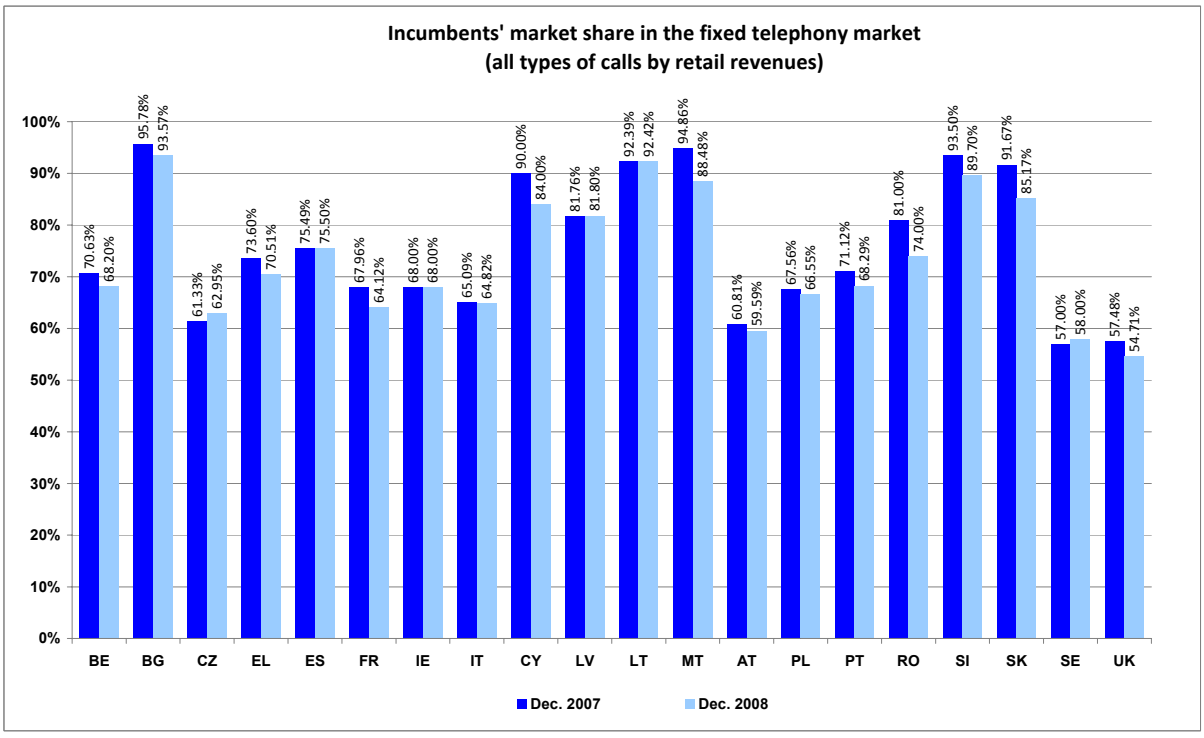
[38] The split between national and international calls is not available for Estonia. The split is confidential for Luxembourg.

Figure 32



In some Member States, the incumbent's market share remains high (Figure 33). In Sweden and the Czech Republic, the share has actually increased.

Figure 33



Choice

Direct Access provided by alternative operators (the provision of publicly available telephone services through LLU and/or proprietary infrastructure) remains low in the EU, with three quarters of EU subscribers still using the incumbent for direct access (Figure 34). The number

of subscribers making use of alternative operators has continued to increase, from 20% in July 2008 to 24% in July 2009 (Figure 35), but this had no significant impact on the total market shares in terms of revenues and volume. There were also increases in subscribers using national (+8%) and international (+9%) calls from alternative fixed operators (Figure 34).

Figure 34

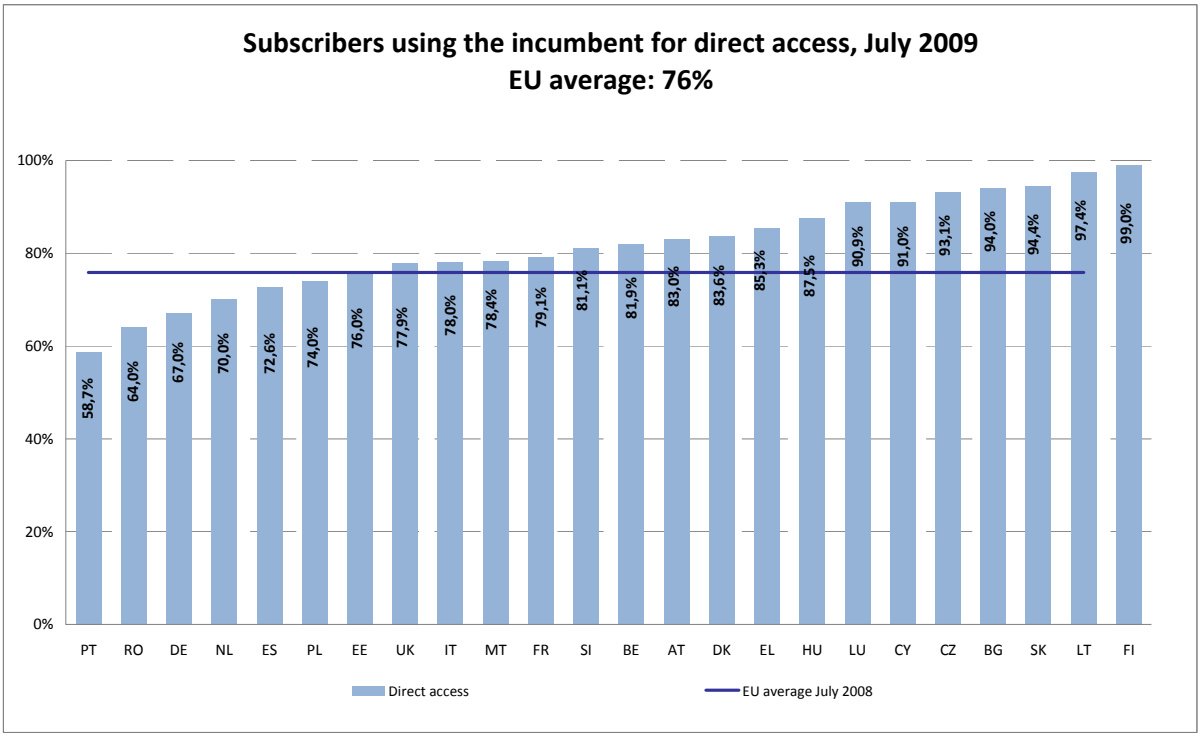
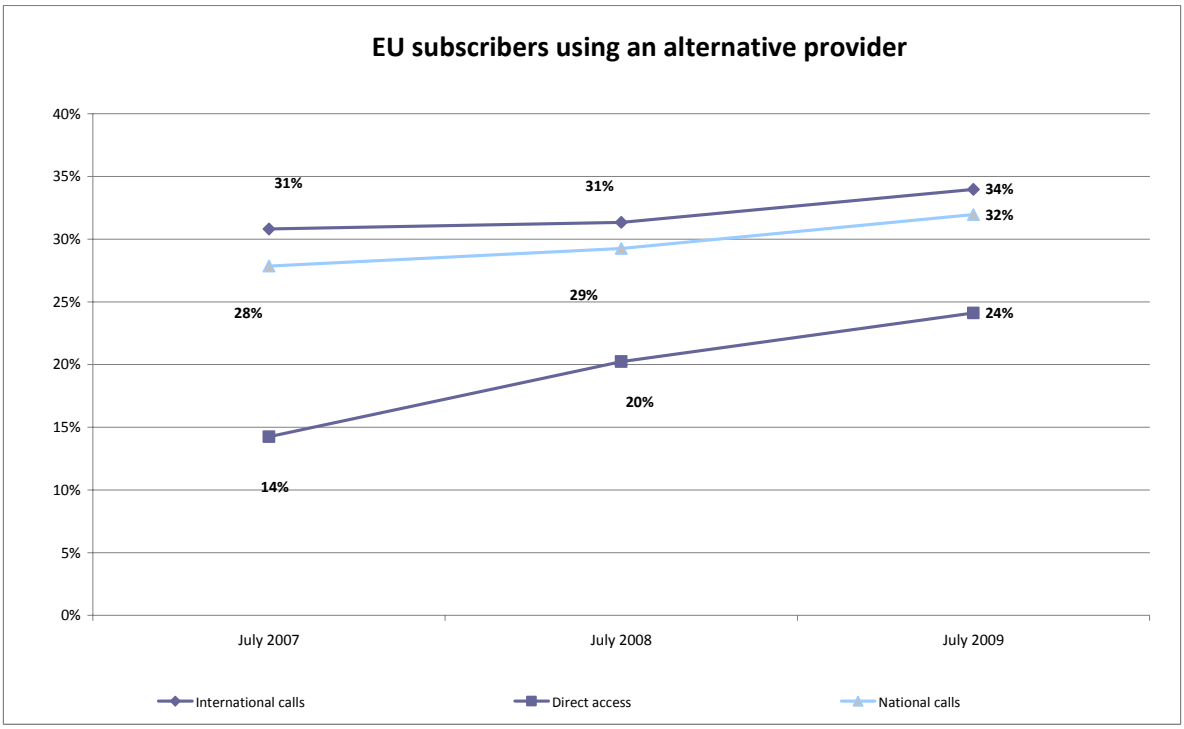
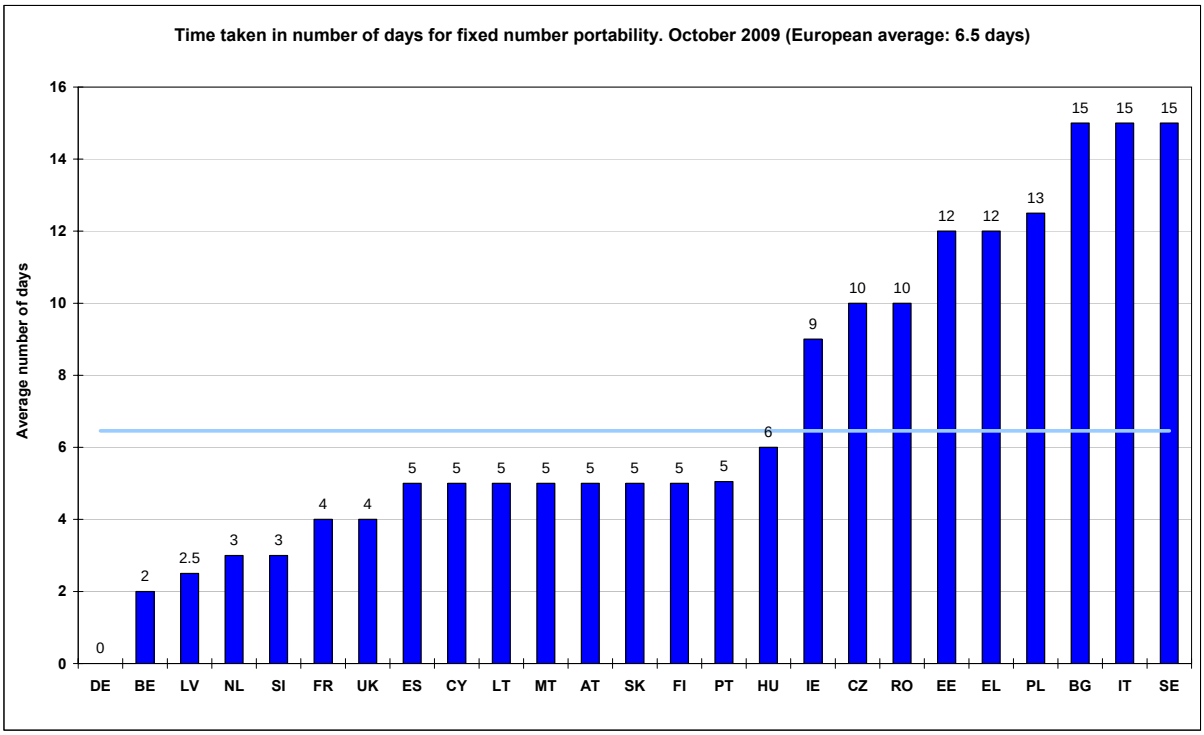


Figure 35



Fixed number portability is an important tool to stimulate competition in the fixed telephony market. The average time needed to port a number at the wholesale level in the EU-27 is now 6.5 days (down from 7.5 days last year), although in some countries it still takes more than two weeks (Figure 36).

Figure 36



Retail and wholesale prices are stable

Fixed voice telephony tariffs have increased in the past year. Following the OECD methodology[39], the price of the 3-minute local call increased by 3.7%, while the 3-minute national call increased by 4.8%. The 10-minute local call increased slightly by 0.5%, while the 10-minute national call increased by 4.1%. These results suggest that competition in the fixed market is weakening. As highlighted earlier, this is possibly due to the declining importance of the market.

39 OECD methodology is based on baskets defining average consumptions for different services. The definition of the OECD baskets include the criteria to cover at least 50% of the market share of each country, based on available subscriber numbers. This will normally include the two largest operators in each country. In some cases there has been a change of "second operator" from last year. All relevant packages from each operator are considered, but the final results presented here only show the cheapest package for each basket. In order to build the baskets, Teligen has collected tariff data from primary sources, i.e. directly from the telecoms operators, their websites and pricelists. Data was validated by the NRAs so as to reinforce the reliability of the information. For more information see Annex.

Figure 37a

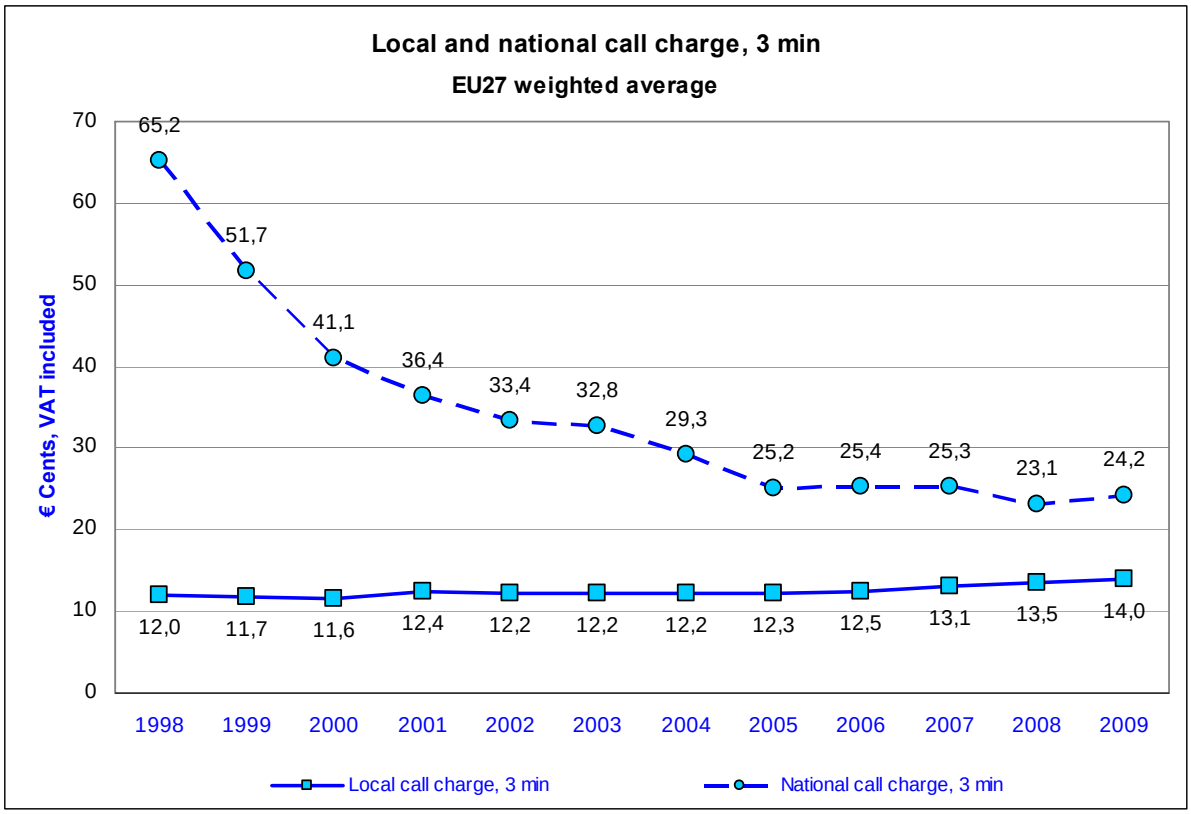


Figure 37b

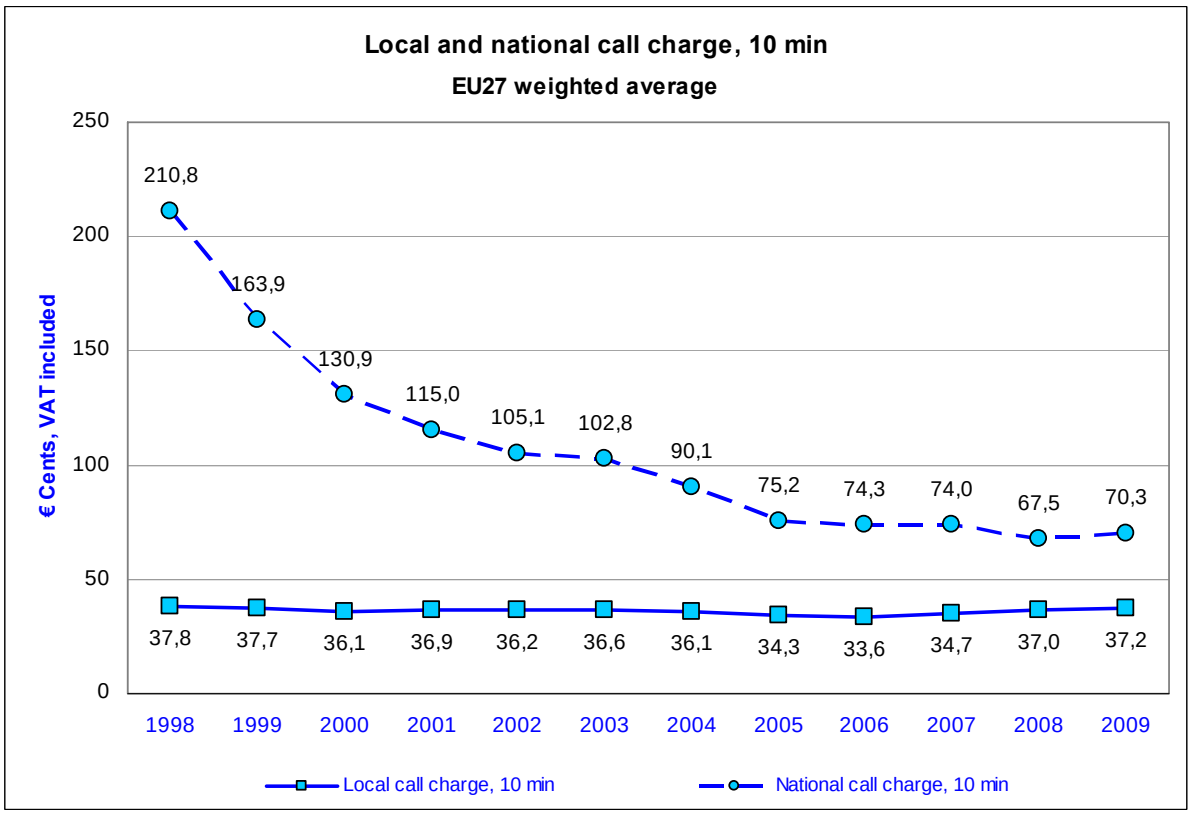


Figure 38a

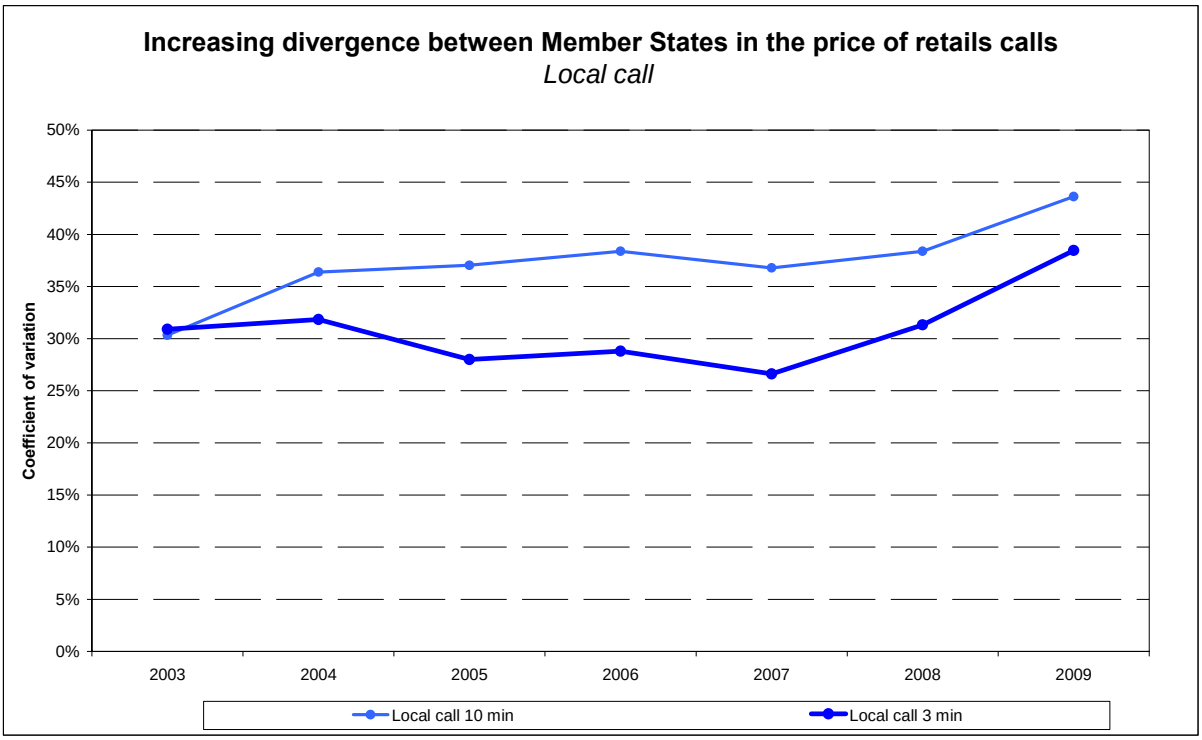
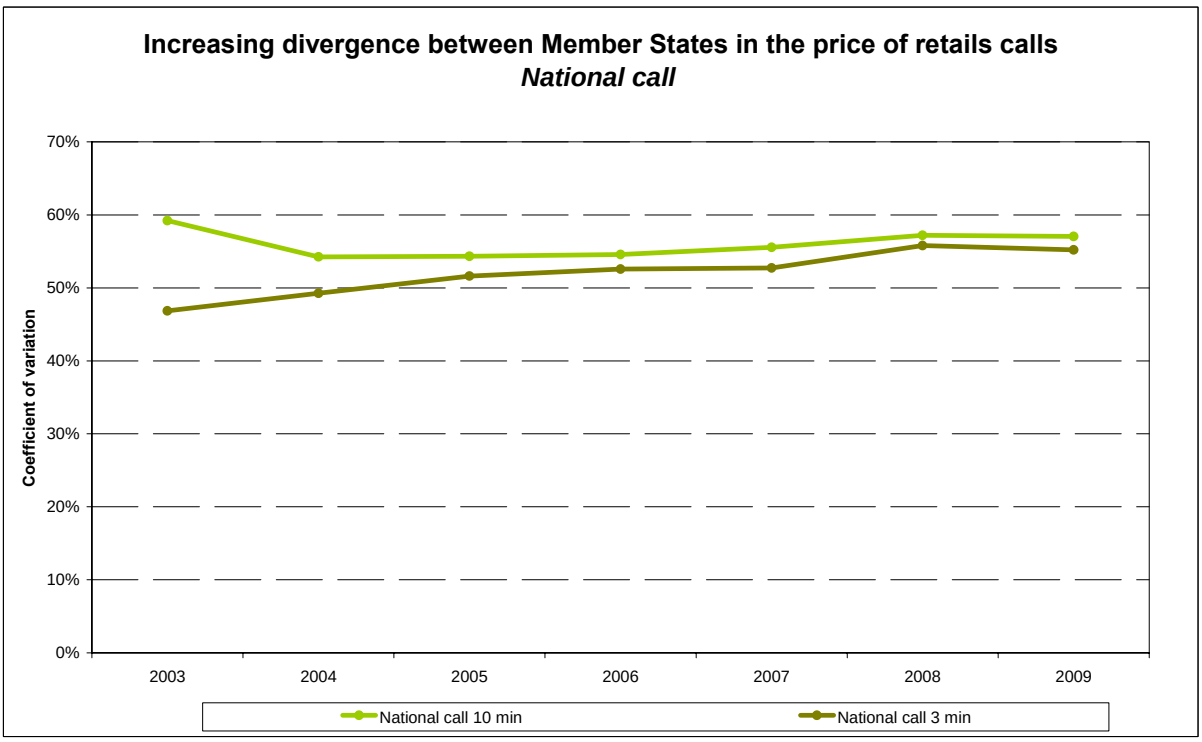
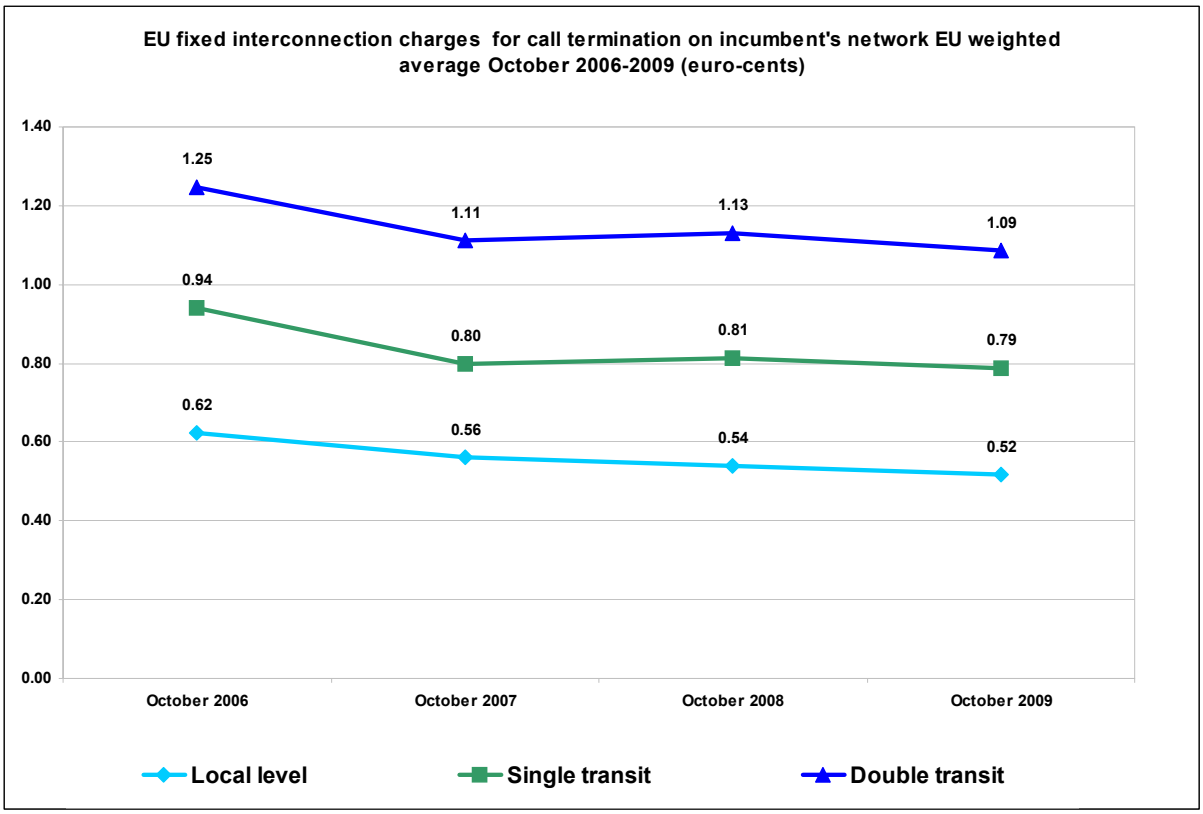


Figure 38b



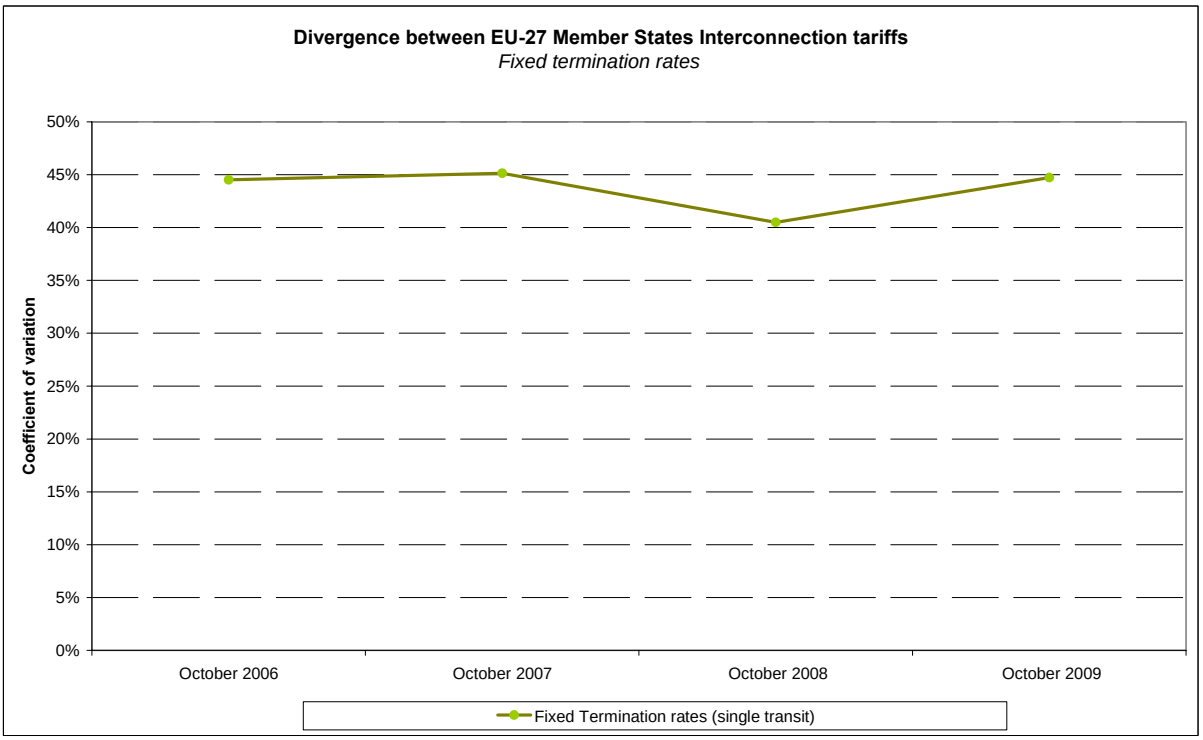
EU average incumbent fixed interconnection rates remained stable with only a slight decrease over the last year: down 3.7% in the local and the single transit levels and 3.5% in the double transit (Figure 39a). The countries with the lowest charges are, as last year, the UK, Estonia, Sweden and Cyprus.

Figure 39a



Divergences in fixed termination rates among Member States (Figure 39b) have not decreased over the last years. Variations are now marked and slightly increasing.

Figure 39b



REGULATORY DEVELOPMENTS

INSTITUTIONAL FRAMEWORK

Independence of national regulatory authorities

Since the 2002 regulatory framework came into effect, the Commission has continuously monitored the requirement for independence of NRAs, and has taken action when necessary. The main issues to arise in this respect are often connected to institutional arrangements including the attribution of regulatory functions, the rules with regard to the appointment and the dismissal of the regulator and the availability of adequate resources (staff, expertise and funding).

Member States should ensure that NRAs are legally distinct from and functionally independent of electronic communications networks and services providers. This requirement for structural separation between the regulatory function and activities associated with ownership and control is particularly relevant when Member States retain ownership or control of electronic communications undertakings. In 2009, this was still an issue in certain countries. For example, in Romania, it appears that the Ministry carries out regulatory tasks while also being involved in the management of electronic communications undertakings. For that reason, a letter of formal notice was sent to Romania in October 2009. In Latvia and Lithuania, the Ministries were considered to be vested with regulatory powers while also being involved in activities associated with ownership and control of state-owned undertakings. After the Commission sent reasoned opinions to these Member States in April and June 2009, the respective authorities adopted legislation providing for transfer of the regulatory functions to other ministries. The Commission services are monitoring the practical implementation of this new legislation in the light of the requirements of the regulatory framework with regard to transparency and impartiality of decisions. A similar issue is currently under investigation in Estonia.

Clear rules regarding the formal establishment of the NRA structures should enhance the impartiality and the transparency of the NRA's functioning. The rules for dismissal of NRA management are fundamental in this regard. In 2009, the Commission was able to close infringement proceedings regarding the NRA's independence in Luxembourg. In two Member States, Romania in January 2009 and Slovakia in May 2009, infringement proceedings were launched because of the dismissal of the head of the NRA before the terms of office had expired. The Romanian authorities restructured the NRA by means of emergency decrees, which should become law, providing for a clear and stable legal basis for the functioning of the NRA. In Slovakia, new legislation was adopted in February 2010 restricting the grounds for dismissal of the head of the NRA. In Slovenia, the NRA's director was dismissed before the end of his term in the context of the assignment of a 3G licence. The Commission's services are currently looking into this issue.

The Commission's application to the Court for incorrect transposition in Poland of the provisions relating to independence of the NRA was withdrawn[40] As the Polish authorities amended their legislation and reintroduced a fixed term of office for the president of the

[40] Case C-309/08, Commission/Poland.

NRA. At the same time, a list of conditions for dismissal was established so as to avoid arbitrary intervention in the NRA's functioning.

In Ireland, the government issued a statement on economic regulation. While acknowledging the need for independent regulation, it nevertheless stated that ministerial policy directions may be necessary and introduced resourcing and budgetary constraints on the NRA.

The Commission services will continue monitoring potential problems with regard to the independence of the NRAs.

Powers and resources of national regulatory authorities

National regulatory authorities must be endowed with the appropriate legal powers to carry out their tasks related to market regulation and consumer protection. In Poland, the relevant law was reviewed so as to allow the President of the NRA to take full responsibility for market definition and to exercise fully, its competences in the market analysis process. In Bulgaria, the number of NRA board members was increased by new legislation and their mandate was prolonged. Furthermore, the NRA was also endowed with more specific powers with regard to digital switchover. The Finnish NRA received new responsibilities related to the extension of the scope of universal service. In Belgium, an amendment to the legislation entitles the NRA to adopt a retroactive decision under certain conditions, when decisions are annulled by a Court judgement. As to the German legislation of 2007 regarding the regulatory treatment of 'new markets', it was confirmed by the European Court that the NRA's discretionary powers cannot be limited as to its responsibility to carry out market analyses.[41]

It is vital that NRAs are able to enforce the regulatory obligations imposed. This has again been reported as a concern in Estonia and Bulgaria, where fines are of insufficient levels or not applied consistently. On the other hand, procedures for enforcing obligations via the medium of fines have been clarified and strengthened by further legislation in Belgium, where the NRA is now able not only to impose higher fines but also to impose them more rapidly, without issuing a preliminary formal notice. In Portugal, a new system has been established for fines and sanctions for breaches of legal and regulatory provisions. In Spain, the NRA adopted a standard procedure for payment of penalties, which is applicable to all reference offers.

In a certain number of Member States, the NRAs tend to consider voluntary commitments made by certain undertakings as a means of providing better enforcement of regulatory obligations. The effects of this negotiated approach still remain to be seen. In Italy, the NRA intensively examined a series of voluntary commitments from the incumbent as regards open access to its wholesale services. In Poland, an agreement was signed between the NRA and the incumbent in order to provide for voluntary restructuring and non-discriminatory access for alternative operators. A draft law would allow the President of the NRA to accept voluntary commitments.

The capacity of an NRA to undertake its tasks also depends on its effectiveness in terms of powers and resources. Limited human and financial resources have still been reported in a number of Member States (e.g. Estonia, Poland, Slovakia) whilst some have increased their staff in 2009 or are planning to do so (Greece, Luxembourg).

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[41] Judgement of 3 December 2009, C-424/07, Commission/Germany, not yet published.

Dispute resolution

In the event of disputes arising between providers of electronic communications networks or services, the NRA should be able to issue a binding decision. The dispute should in principle be resolved within four months. However, in many Member States this timeframe is still not respected.

Sometimes, dispute resolution is used as a regulatory tool to address perceived incomplete regulation. In particular this was observed in Poland and has in the past been seen in Austria. However, the Austrian NRA now includes the details of the remedies in the draft decisions from the very beginning, avoiding the need for further clarification through disputes. If an NRA, instead of issuing specific regulation, would tend to adopt different decisions for operators at different points in time, this would lead to discrimination and regulatory uncertainty among market players. By this means, the consultation and market analysis procedures laid down in Articles 6 and 7 of the Framework Directive might be circumvented. The Commission's services will follow developments.

An increased number of disputes have been observed in the United Kingdom, where a Court judgment of 2008 required the NRA to depart, where appropriate, from earlier SMP decisions when exercising its dispute resolution powers. In Ireland, where market players voiced concerns about the NRA's implementation and enforcement capabilities, the NRA recently launched a new consultation on its dispute resolution procedures.

In Sweden, the competence of the NRA to settle disputes regarding interconnection agreements remains limited in scope. The infringement proceeding launched in 2008 is still pending, even though work is ongoing to address the issue.

Appeals

The right to an effective judicial review of NRA decisions, as laid down in Article 4 of the Framework Directive, is granted to anyone who is "affected" by that decision. The terms user "affected" or undertaking "affected" are interpreted by the Court of Justice as meaning that not only the addressee of the decision taken in the context of a market analysis, i.e. the (former) SMP undertaking, but also any user or undertaking in competition with it, whose rights are or may be (adversely) affected by it, has the right to appeal against that decision.[42]

In Sweden, the government adopted an amendment to its legislation, enabling all market players to appeal NRA decisions. This allowed the Commission to close the relevant infringement proceeding in October 2009. In Austria, questions have been raised with regard to the operators' right of appeal against the withdrawal of regulation when a market is no longer considered susceptible to ex ante regulation at the national level. In Greece, a judicial decision is pending at the Supreme Administrative Court concerning which instance is constitutionally empowered to handle appeals against the regulatory decisions of the NRA. By settling the jurisdiction of the administrative Appeal Court, to which the appeals are currently addressed, such a decision should determine the effectiveness of the appeal mechanism.

Systematic appeals, often combined with lengthy proceedings, create ambiguity and legal uncertainty in some Member States (Belgium, Greece, Luxembourg, Poland, Portugal,

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[42] Judgements of 21 February 2008, C-426/05, Tele2 Telecommunication, Rec. 2008, p. I-685, and 24 April 2008, C-55/06, Arcor, p. I-2931.

Sweden). A significant increase in the number of appeals has been reported in the United Kingdom putting a strain on the regulator's resources. Uncertainty in the market is becoming especially apparent when operators do not comply with obligations or when new regulations imposed are not able to fully replace annulled decisions as they are not always applied retroactively. On the other hand, the situation in Belgium has improved as new legislation allows the NRA to adopt retroactive decisions under specific conditions.

IMPLEMENTATION OF REGULATORY MEASURES

Decision making

Market analysis

2009 was characterised by patchwork of progress across Member States with regard to market analyses[43]. On the one hand some regulators advanced with their periodic market reviews and/or addressed the key regulatory bottlenecks with more effective remedies tailored for the next generation environment (e.g. access to unbundled fibre loops in the Netherlands). At the same time, some other regulators did not make visible progress in analysing markets (e.g. Belgium, Luxembourg). Romania and Bulgaria, whilst making progress have yet to finalise their first round market reviews. It also appears that regulators are prioritising the setting out of principles for the regulatory treatment of next generation networks (NGN). This important work is often only at a preparatory phase and has hence not yet resulted in final market analyses. In addition, the NRAs' regulatory agendas were sometimes influenced by the increasing number of disputes (e.g. UK, Slovenia, Sweden). Also, in a number of cases, appeals and/or court decisions obliged the regulators to re-conduct the previously concluded market analyses or to re-impose remedies (Austria, Belgium, Denmark, Germany).

Remedies

Whilst a proper market analysis is an important step in identifying competition failures, the final test of the success of regulation is measured by the ability of the remedies imposed to resolve those failures. With this regard, and in order to enhance the internal market, three important issues need to be addressed: consistency, clear and appropriate remedies as well as effective and timely enforcement.

Consistency of regulatory approaches is an issue which the Commission has raised repeatedly. Significant divergences in the regulatory approaches create competitive distortions and obstacles to the development of the internal market. Under the current framework the Commission, in addition to Article 7 comments letters, has addressed the problem by using its powers to issue harmonisation measures. In May 2009, the Commission adopted a Recommendation for the regulatory treatment of fixed and mobile call termination rates[44]. Another important area where different regulatory practices are emerging and in which the Commission will produce guidance, is that of the regulatory treatment of fibre in the wholesale broadband markets.

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[43] See the Communication on Market Reviews under the EU Regulatory Framework (3rd report).

[44] Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (C(2009) 3359), OJC 20.05.2009, L124, p67

In order to enable the Commission and the NRAs to contribute to the maximum to consistency under the Community consultation mechanism, it is important that draft regulatory measures are notified with sufficient detail. In particular, the Commission has emphasised that cost oriented price caps and glide-paths constitute regulatory obligations referred to in Article 16 of the Framework Directive and have an effect on trade between Member States. In this regard, the Commission launched an infringement proceeding against Germany for the failure to notify its recent setting of mobile termination rates and the underlying cost accounting methodology. The Commission has also reminded NRAs (e.g Latvia, Lithuania, Poland and Sweden) to notify the details of the glide paths.

Inconsistency is further increased by the fact that the Commission's comments under the Community consultation process were not followed in all cases by the NRAs. For example, this was a case in the mobile termination and in the wholesale broadband markets. In this respect, the newly adopted framework gives the Commission further tools in the area of remedies and in particular, provides for a mechanism where the Commission, the Body of European Regulators (BEREC) and the NRA in question shall co-operate closely to identify the most appropriate and effective remedies in the light of the regulatory objectives whilst also taking into account the need to ensure the development of consistent regulatory practice.

Likewise, effective enforcement of remedies remains an issue which needs to be addressed by regulators. In some Member States it appears to take more than two years after the initial decision on remedies before the obligations are properly enforced. This has been the case for example in Germany for the enforcement of bitstream remedies. In Italy, the 2008 bitstream offer was approved only in May 2009, and the bitstream offer for 2009 has not yet been approved. In Belgium, the reference offer for VDSL2+ was still not finalised, although the incumbent had already started commercialising this technology on a large scale since April 2008. The delays in enforcement may imply that remedies become outdated when they finally are available to alternative operators (e.g. ATM bitstream in Germany). In addition to timeliness, the remedies should also be clear and sufficiently detailed. The low or even the lack of take-up of wholesale broadband products in for instance, Estonia, Latvia, Lithuania, Slovakia, is partly explained by loosely defined remedies which also tend to invoke disputes, further tying regulators' resources (e.g. Slovenia, Sweden).

Despite these persistent shortcomings positive developments were also reported. In Spain, the reference offer adopted for access to passive infrastructure was positively received, although it has been mainly used for connecting mobile base stations and in some cases for fibre connections to business customers. In Austria, the draft measures currently under preparation will already include the details of the remedies to be imposed, contrary to the previous practice where the details were set only through dispute resolution. Portugal has mandated the publication of indicators, which should enable a better follow-up of the implementation of remedies and, in particular, non-discriminatory obligations. Furthermore, in some countries (such as Spain) the regulators have set up forums to discuss appropriate regulatory approaches or even the implementation of imposed remedies. These informal discussions are welcomed by operators, although a more leading role is expected from regulators.

Deregulation of retail markets continued in 2009[45] allowing regulators to focus on the effective regulation of key wholesale markets. With regard to the wholesale markets, further

[45] See further details in Fixed Implementation section below.

deregulation took place in transit markets and at least partially in the market for trunk segments of leased lines.

NRAs are increasingly considering the acceptance of voluntary commitments/undertakings by SMP operators in order to enhance, in particular, non-discriminatory access to regulated products. It has to be stressed first that to the extent any undertakings are to be made binding by way of an administrative decision they are to be regarded as regulatory obligations. Secondly, if undertakings are aimed at facilitating the enforcement of regulatory obligations - such as the provision of access on a transparent and non-discriminatory basis – they are to be considered as directly related or ancillary to these regulatory obligations. Consequently, undertakings or their modifications must be made subject to a consultation both at national and Community level.

Consultation with stakeholders

The consultation mechanism at national level, as required by the regulatory framework, appears to function well in Member States. Yet, some criticism was raised by stakeholders. In Hungary, Romania and Latvia some interested parties considered that the consultations lacked the necessary dialogue with stakeholders.

One of the key areas which has been subject to intensive consultation recently concerns the regulatory treatment of NGAs. Stakeholders are expecting these consultations to be carried out in full transparency and in a timely manner.

Broadband Implementation

Ensuring that all citizens can participate in the digital economy is increasingly becoming a political objective for governments across the EU. Consequently, national strategies have been developed in a significant number of Member States for traditional broadband but also for NGA networks with the aim of enhancing access to high-speed broadband. Due to the strategic importance of broadband services in the wider economic context, the establishment of appropriate regulatory measures in the markets for wholesale physical infrastructure access and wholesale broadband access continue to be crucial to develop sustainable competition.

Almost all NRAs have regulated the broadband markets and imposed regulatory measures. However, Romania and Bulgaria have not yet assessed the markets for wholesale broadband access. Deregulation has taken place in Malta, partly in Portugal, and in the residential segment in Austria in relation to the market for wholesale broadband access. For the first time, access obligations were imposed on a cable network in Denmark.

Although regulation of wholesale inputs improved the competitive situation in the broadband markets over the past years, the positive development in several Member States has stagnated or even deteriorated recently. This is partly due to the lack of effective enforcement of remedies. In some cases, certain access products were made available only recently, for example naked DSL in the Czech Republic, Spain and Cyprus. The relevant reference offers for bitstream or LLU products, such as for ADSL or VDSL, are sometimes delayed (e.g. in Italy, Germany, Belgium, Bulgaria, Luxembourg, Slovakia where the bitstream regulated product only became available in 2009) and operators in some cases need to negotiate the concrete access conditions on a commercial basis, leading to significant disputes and lack of legal certainty.

Reference offers need to be adapted regularly, for example in 2009 they were modified in Cyprus, Slovenia, Greece, Lithuania, Luxembourg, Spain or Hungary. In other cases, the regulatory prices were not determined by regulation (e.g. in the Czech Republic for bitstream) or they needed to be re-examined (e.g. in Poland, Greece, Italy, Luxembourg, Sweden). Some Member States have reduced the prices for LLU and, currently, the EU average monthly prices for full and shared LLU are €8.55 and €2.24, respectively. Ancillary services to LLU and bitstream access also need to be fully taken into account by the NRAs in order to ensure that the access products can be appropriately taken up (see for example some collocation problems reported in Slovakia).

In addition, the current market trend towards bundled products is significantly affecting the competitive dynamics in the broadband sector and is creating an additional regulatory challenge to NRAs. Therefore, it is necessary to examine to what extent the wholesale access products available enable alternative operators to duplicate economically the incumbent bundles or to offer the same products (and in particular IPTV). During 2009, some NRAs continued to analyse the incumbent's offers in these respects (e.g. Ireland, Austria, Spain) and in some cases more efforts or even a revision of the methodology employed was requested by the alternative operators. Furthermore, NRAs have also been evaluating alleged cases of margin squeeze by the incumbent operator, such as in Denmark or the Czech Republic.

Next Generation Access Networks (NGAs)

Investments in NGA networks have progressed in 2009 in a number of Member States both by the incumbent and also alternative operators. Furthermore, cable operators have been upgrading their networks towards Docsis 3.0 standard (e.g. Hungary, Netherlands, Portugal, United Kingdom, Poland, Slovenia).

In order to foster NGA deployment, legislative measures have been taken in some Member States to facilitate access to physical infrastructure (not limited to the incumbent's infrastructure) and facility sharing such as in Portugal or Austria.

However, few NRAs have yet determined the regulatory approach towards NGA and operators are requesting more transparency and legal certainty. Some NRAs have advanced in defining the regulatory approach (e.g. France, Portugal, Spain) and others are consulting with stakeholders on the current challenges or the most appropriate regulatory approach (e.g. Austria, Poland, Italy).

In terms of concrete regulatory measures in respect of fibre, there is a need for further consistency. Some NRAs have included fibre in the relevant wholesale markets and imposed obligations (e.g. the Netherlands, Finland, Latvia, Estonia, Slovenia where they have notified such a measure even though the remedies on fibre are not yet effective[46]) while others have excluded fibre from the market or have not imposed regulation on it (e.g. France, Germany, Italy, Cyprus, Greece, Luxembourg, Portugal). The Netherlands and Slovenia[47] have imposed an obligation of unbundling fibre loops. In Spain, the NRA did not differentiate on technologies but on speeds and imposed a bitstream obligation limited to the provision of speeds up to 30 Mbps. Furthermore, some other NRAs have differentiated the remedies

[46] In the case of the references made in this section to the regulation of fibre in Slovenia, it is necessary to indicate that the obligations mentioned have been adopted but at the time of drafting this report they were not yet effective.

[47] The final measure is yet to be adopted.

imposed over fibre and copper networks (e.g. in Estonia different remedies have been imposed, in the Netherlands, Slovenia[48] and Finland different pricing principles apply to fibre and copper loops).

In addition, access to passive infrastructure (particularly ducts) or in some cases to dark fibre as a last resort has been imposed by many NRAs as a remedy in the market for wholesale infrastructure access, in order to facilitate network deployment by alternative operators (e.g. Denmark, Greece, Estonia, Slovenia[49], Portugal, Germany, France, Spain). In Spain a reference offer on access to ducts was approved during 2009, and in Portugal the already existing obligation under the terms of the concession contract has been complemented by an obligation following the finding of significant market power in the market for physical network infrastructure access. Due to the lack of a regulatory offer, access to civil infrastructure had to be negotiated in Germany on a commercial basis. In some other Member States (such as the UK) there is currently no regulated access to ducts or dark fibre. Also, and as already indicated in the previous Report, in some cases measures have been taken in relation to in-house wiring by means of symmetric obligations such as in France, Portugal and Spain, or as asymmetric obligations (imposed on SMP operators only) such as in Slovenia, even though these obligations are not yet effective.

Generally, operators request transparency and legal certainty from the NRAs in relation to NGA deployment (e.g. in Hungary, Portugal, Belgium, Germany, Slovenia, Spain, Italy). In particular, alternative operators call for a transparent migration process from copper to NGA. The deployment of fibre networks is likely to modify the current network topology and access points (in particular in relation to LLU), thus affecting the investments made. It is necessary that NRAs adopt a proactive regulatory approach which promotes investment by the incumbent and alternative operators, whilst preserving the investments already made by alternative operators in LLU. Some NRAs have imposed transparency obligations or established forums for the incumbent to disseminate its plans to alternative operators in relation to its network roll-out (e.g. in Spain – as regards the deployment of remote nodes- or Denmark, Belgium, and current plans for a similar approach in Austria).

In order to achieve further consistency and an appropriate and predictable regulatory approach towards NGAs, as well as to encourage NRAs to advance in this process, the Commission will adopt a Recommendation on regulated access to Next Generation Access Networks in the course of 2010.

Mobile Implementation

Mobile Termination Rates

There still remains significant divergence in applied cost accounting methodologies and thus in levels of mobile termination rates across the Member States which is why the Commission adopted a Recommendation on termination rates in May 2009. The Recommendation provides a methodology for setting termination rates at the level of costs of an efficient operator.

Many NRAs completed their second round market analyses of the mobile termination market and some have even carried out their third (e.g. Austria). NRAs have set glide paths to reduce

[48] The final measure is yet to be adopted.
[49] The final measure is yet to be adopted.

rates further over the coming years and generally some further progress was made during the year in terms of setting mobile termination rates at levels approaching the efficient costs. Most NRAs do not yet have LRIC models in place. However, rates are being increasingly set based on 'bottom-up' LRIC models, although those models are not yet in line with the Recommendation. On the other hand many NRAs (e.g. Belgium, France, Poland, Austria, Spain, Portugal) have indicated that they intend to develop efficient operator cost models and intend to comply with the Commission Recommendation. As a general comment the Commission reiterated its view that the termination rates should be set at the levels reflecting forward-looking costs of an efficient operator. Whilst it is still common to allow smaller operators and late entrants to apply higher termination rates, correcting asymmetries in rates seems to be a common trend and in a number of cases the Commission has called on NRAs to phase out asymmetries (e.g. Denmark, Romania, Spain).

In some cases rates are still set using benchmarking (e.g. Estonia, Malta, Luxembourg, Portugal). In commenting on benchmarking, the Commission has stated that inappropriate benchmarks imply persistent competitive distortions and invited NRAs to use the benchmarks only of those countries which already apply the rates of an efficient operator.

Overall the effects of regulation of mobile termination rates has lead to a reduction in the overall average rate for the EU which now stands at 6.70 €-cents, down from 8.55 €-cents in October 2008.

Although SMS traffic is currently not regulated with the exception of France, NRAs have intervened informally in some cases to try to reach lower rates which would better reflect the underlying costs (Finland, Poland).

Call access and origination

The mobile access and call origination market is regulated only in three Member States. In Cyprus, the NRA reviewed the market and finding that the incumbent still had SMP. The NRA maintained all remedies imposed in the first round analysis, yet withdrew the carrier selection obligation. It introduced an obligation for MVNO access. In Spain, the mobile access market is the only market that the NRA has not yet reviewed. Following the access obligations imposed by the regulator on the three MNOs present in the market in 2006, several undertakings are currently providing mobile services in the market. In Slovenia, the Commission endorsed the NRA's plan to require Slovenia's largest mobile operator to continue to provide its competitors with access to its network at regulated prices.

Roaming

In general the Roaming Regulation appears to be implemented well in most Member States with only a few difficulties reported. In most cases it seems that prices have been set close to the caps and, with only few exceptions (Hungary and Romania), retail data roaming prices have not yet fallen despite the lower wholesale charges. A number of Member States have reported that operators claim that meeting the deadline for implementation of the cut-off limit (March 2010) is difficult. In most countries alternative offers to the Eurotariff exist. One country (Luxembourg) reports continued problems with inadvertent roaming.[50]

[50] According to the amended Roaming Regulation (Regulation (EC) No 544/2009) the Commission is requested to prepare an interim report no later than 30 June 2010. This interim report shall include a

Fixed Implementation

Retail calls regulation

The trend towards deregulation of fixed retail markets continued during 2009 as more NRAs found these markets to be competitive (Italy, Austria, Czech Republic, Romania, Malta, Spain, Germany, the Netherlands, and with the exception of a few product markets, also in the United Kingdom) although regulatory issues remain in some Member States.

In Italy, the NRA maintained the obligation to notify prices and conditions 30 days in advance of the commercial launch of retail services, cost accounting, as well as the obligation not to unreasonably bundle retail offers. In Austria, whilst the NRA withdrew existing regulation in the retail calls markets for residential customers, it defined as susceptible to ex ante regulation the market for national and international publicly available telephone services for non-residential customers. In Estonia, the first round of market analyses resulted in non-SMP findings on fixed retail call markets. However, following concerns about excessive pricing the competition authority launched an investigation on that issue, which resulted in the incumbent offering lower prices from January 2010. However, the final decision has not yet been issued. In the Netherlands, following the latest market decision of December 2008, retail markets were deregulated, as a first step for the consumer market since beginning 2009, and as a second step for the business markets as from 1 January 2010. In Germany the NRA decided to de-regulate the fixed national calls markets and the wholesale market for transit services.

Interconnection

Actions by NRAs in relation to fixed termination have resulted in a modest reduction in the levels of average fixed termination rates however the levels of such rates still remain diverse. In general there were no significant changes in approaches with most NRAs continuing to apply cost-orientation to fixed termination rates, although cost-accounting methodologies are not always yet in line with the Commission Recommendation. A number of NRAs updated their Reference Interconnection Offers in the course of 2009.

The question of inclusion of IP products within defined markets has arisen in a few countries. In Germany, while the incumbent launched a double-play all-IP retail product, the NRA also included all-IP access lines in its draft remedies for the market for access to the public telephone network at a fixed location. In Slovenia, formal disputes between the incumbent and two alternative operators concerning the level of interconnection rates for IP traffic, resolved via mediation, have not yet provided the necessary technical solution. In Spain, the NRA broadened the scope of regulation by including IP interconnection.

Regulation was withdrawn in some Member States from the wholesale transit market (Germany, Netherlands, Slovakia, Spain). In contrast, in the UK, the NRA re-consulted on modified proposals concerning the market for wholesale transit services proposing to continue to find that the incumbent has SMP in the single transit market and to impose a range of regulatory remedies on it.

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general summary of the latest trends in roaming services and an intermediary assessment of the progress towards achieving the objectives of the Regulation as well as of the possible alternative options for achieving these objectives.

Leased lines

In the retail leased lines market, regulation was withdrawn in several countries (Finland, Czech Republic, Denmark, Germany, Italy, the Netherlands, Spain). At wholesale level, a number of NRAs found the market for trunk segments of leased lines to be at least partially competitive and proposed withdrawal of the existing regulatory obligations (Denmark, Italy, Poland (connections between 145 larger cities), Slovakia and Spain (except for ten undersea routes). Regulation on the termination segments was maintained (Italy, some submarkets of terminating segments of leased lines in Austria, Spain).

Broadcasting Implementation

Regulation of broadcasting markets

Broadcasting transmission markets are no longer susceptible to ex-ante regulation according to the Commission Recommendation on relevant markets. Nevertheless, several NRAs notified or adopted new decisions in 2009. This was the case in France (regulation of non-replicable sites in the market of transmission of programmes in digital terrestrial mode), Austria (definition of markets for multiplexing broadcasting signals, analogue terrestrial FM radio transmission, and access to broadcasting facilities), Sweden (free-to-air digital television, and analogue terrestrial radio transmission), Lithuania (analogue and digital terrestrial and cable transmission), and Spain (terrestrial analogue and digital transmission market, with the imposition of additional obligations). In some cases, it was found that markets were considered to be competitive and regulatory obligations were lifted (Czech Republic, Sweden with regard to the pay-TV market).

In the Netherlands, the NRA continued the regulation of analogue cable transmission and imposed on the two largest cable operators the obligation to provide analogue signals, including access to the transmission platform for the purpose of resale. This kind of wholesale line rental offers for cable transmission are expected to be made available soon to alternative providers, which would then be able to include analogue television in the provision of their services to the customer. The Commission noted, with regard to these notifications, that the proposed obligations should not hamper the investment in, and the development of, digital services and infrastructures.

Digital switchover

Member States have been invited since the Commission Communications of 17 September 2003[51] and 24 May 2005[52] to establish switchover strategies, and to switch off analogue broadcasting at the latest by 1 January 2012[53].

While some Member States already completed analogue switch-off (Denmark, Germany, Netherlands, Finland, Sweden), most Member States are actively preparing this process. By taking further switch-off decisions, by city or region, or by carrying out pilots, Member States should be able to complete the whole process within the following two years. Most Member

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51 Communication of 17 September 2003 on the transition from analogue to digital broadcasting (from digital 'switchover' to analogue 'switch-off') (COM(2003)(541 final).

52 Communication of 24 May 2005 on accelerating the transition from analogue to digital broadcasting (COM(2005)204).

53 See COM(2009) 586 and C(2009) 8287

States have further advanced the switchover date to 2010 (Spain in April, Latvia in June, Estonia in July, Malta and Slovenia before the end of the year) or to 2011 (Hungary, Czech Republic, Austria, Cyprus, France) and a few are waiting until 2012 (Bulgaria, Greece, Lithuania, Portugal, Romania, Slovakia and the UK). Poland is the only Member State that has scheduled the switch-off for July 2013.

In practically all Member States, national plans or strategies have been defined and concrete promotional measures have been taken (e.g. subsidies for equipment of low-income households, national information campaigns, dedicated websites). In Poland, a draft plan for the introduction of DTTV was approved by the Council of Ministers in December 2009. Where the introduction of DTTV has already started, coverage percentages are steadily increasing, attaining 70% or more of the population (e.g. France, Lithuania, Slovakia, United Kingdom). Take-up of DTTV by households amounted for example to 37% in Spain and the United Kingdom and 42% in France.

Analogue and digital simulcast seems in some cases to hamper smooth transition to digital terrestrial broadcasting. Further measures had to be taken to speed up the switchover. In Slovenia, subsidies were provided to certain providers having to broadcast in analogue and digital techniques simultaneously. In Hungary, a fine was imposed on the single digital terrestrial television provider for not complying with its obligations with regard to the availability of service and the provision of information.

In the meantime, most Member States continue adopting new legislation regarding the necessary procedures for the granting of broadcast licences. In 2009, national regulatory authorities further carried out or completed tenders or auctions for the allocation of multiplex capacity (Flemish Region of Belgium, Latvia, Portugal, Slovakia), or were preparing for it (Italy, Denmark). In Spain, following a controversial decision of August 2009, DTTV licence holders have been allowed to provide also pay-TV services.

Pursuant to the Authorisation Directive, Member States are obliged, when assigning radio frequencies, including for broadcasting purposes, to follow open, transparent and non-discriminatory procedures. Selection criteria must be objectively justified, non-discriminatory, proportionate and transparent. The Commission will continue monitoring legal and procedural arrangements during the transition towards full implementation of digital television as to their compliance with Community law.

THE CONSUMER INTEREST

Tariff transparency and quality of service

The requirement to provide transparent and up-to-date information on tariff plans, prices, and service terms and conditions is one of the fundamental pillars of EU consumer protection rules in the area of telecommunications. In addition, the rules entail specific requirements related to consumer contracts and quality of service.

Consumers continue to face difficulties in comparing complex tariff plans and contractual conditions. This was evidenced also by the second Consumer Markets Scoreboard (2009)[54]. Therefore, the necessity to further advance or to reinforce measures on transparency and quality of service, in order to ensure that consumers can take a better informed decision, is widely recognised. Several Member States have taken concrete action in this respect, introducing new legislation and regulation aiming at easier access to information for consumers. Such was the case at least in Romania, Portugal, France, United Kingdom, Spain, Lithuania, Poland, and Hungary.

Besides amendments to the national legislation, a variety of other measures on particular issues have been taken by several Member States. In Portugal, for example, certain quality of service parameters were redefined for fixed telephony services. The drive for more transparency in this area in Denmark led to discussions on a possible introduction of a service quality index.

As regards quality of service in general, the most notable attention was paid to internet services, and in particular the level of broadband speeds actually provided. One of the most innovative approaches in this context is a deployment of IT tools which allow end-users to test their actual broadband speeds. This form of consumer tools, available for example in Denmark, Latvia, Lithuania, Italy and Greece, are becoming a popular instrument for consumers to verify whether the actual broadband speed delivered corresponds to the advertised speed level and to what they are actually paying for. In Italy, consumers are now able to withdraw from their contracts in case of divergence with the declared connection speed. The Slovenian NRA issued a recommendation on the provision of broadband speeds, and the Portuguese NRA published a report on the quality of service for access to internet services, highlighting the upload speeds and network latency as the main differences between fixed and mobile networks. The United Kingdom NRA carried out a broadband speeds survey comparing the service provision of the largest internet service providers. In Hungary, several operators were subject to fines for a failure to provide correct information to consumers on broadband speeds and data limits.

The EU framework encourages provision of information to allow for a development of independent evaluation mechanisms enabling cost comparisons of alternative usage patterns. Web-based interactive platforms or other, simpler online tools, have been developed in a number of Member States to date. A 'tariff simulator' is available in Belgium, and a new specific website for consumers to check information on roaming has been launched by the Portuguese regulator. Where these websites are already in place for some time, efforts have been dedicated to update, improve or expand the scope of information provided (Denmark, Malta, Slovenia, Sweden, Lithuania, Hungary, UK). An online price comparison tool is under preparation in Romania. Some of the online price guides cover a full range of telecoms services, such as fixed and mobile voice, broadband, and TV. Spain is publishing a comparison of retail broadband offers and quality of service data for different services. While these projects are mostly run by the national regulators, there are some led by the industry, subject to certification from the NRA. This has lead to the development of several national

[54] For instance, one out of four consumers who switched their Internet provides found switching difficult and every tenth consumer who managed to change the Internet provider felt that s/he actually lost out as s/he ended up with an even more expensive provider.
See http://ec.europa.eu/consumers/strategy/docs/2nd_edition_scoreboard_en.pdf

price comparison services in the United Kingdom, and is leading to development of such services in Poland.

Transparency with regard to premium rate and value added services remains an issue of discontent in many countries. The Dutch NRA has undertaken an exercise of enforcing transparency obligations with respect to certain categories of the most expensive premium rate numbers and with respect to correct use of premium numbers, withdrawing those where abuse was suspected. In Germany, price caps were imposed on calls to consumer hotlines; France now obliges service providers to inform consumers of the price for calls to value added services by means of a free short message. Measures to improve transparency with respect to call charges for the widely used non-geographic number ranges were introduced in the United Kingdom; Belgium reduced price caps for mobile calls to certain expensive ranges of numbers and aligned them with fixed calls. Spain adopted a new code of conduct for premium data services, which inter alia reinforces users' information rights, as well as the right to be disconnected from these services. In Portugal, new legislation entered into force where subscribers can opt-out from receiving value-added SMS and MMS.

Consumers are often confused about contractual terms and conditions. To address the most frequent sources of concerns, the Dutch legislator set clearer conditions for termination of indefinite contracts, Spain adopted a Charter of user's rights, with provisions related to more details in contracts, a more efficient procedure for complaints, contract cancellation and rights for mobile prepaid users, and the Slovenian regulator adopted new guidelines on prevention of bill shocks. Overall, the progress in some areas for a number of Member States has been notable and welcome. However, the efforts to tackle the identified deficiencies could be stepped up in many countries. The process of enhancing transparency and quality of service, given its wide-ranging nature, should be regarded as an ongoing and evolving process which has to be monitored and responded to as the market develops and as the move towards the strengthened rules in the revised framework approaches.

Universal Service

Four universal service elements, namely (i) access at a fixed location to telephony services, fax communications and functional internet, (ii) comprehensive directory and directory enquiry service, (iii) availability of public payphones, (iv) and special measures for disabled, those on low income and with special needs, comprise the set of minimum telecommunications services that have to be available to all end-users at an affordable price and specified quality.

These elements should be under regular review. Member States, on the basis of the national conditions, decide what elements are not satisfactorily provided by the market under normal commercial conditions and therefore have to be provided by designated undertaking(s). There are currently three Member States where the provision of these minimum services is carried out without a formal designation: Germany, Luxembourg and Sweden. In the Czech Republic, provision of complementary services to access provision, such as phased payment for a new connection, free itemised billing and selective call barring, were removed from the scope of designations.

Several Member States carried out new designation procedures for some or all elements where previous obligations had expired. The French and the Slovenian fixed incumbent have been designated again to provide access at a fixed location, while another market player was designated for the provision of comprehensive directory and directory enquiry services. The

incumbent operator was designated to provide special terminal equipment for disabled users in the Czech Republic.

Similarly, the universal service obligation was extended for the designated undertaking without a transparent designation procedure in Hungary (via legislation). In Greece, Italy, Bulgaria, the Netherlands, Portugal, and Belgium (other than social tariffs), universal service is provided on the basis of a transitional regime where undertakings involved have not been designated on the basis of the EU regulatory framework. In these instances, the Commission notes that there is a need to carry out a designation procedure respecting the principles envisaged by the EU framework as soon as possible. Preparations for new designations are ongoing in Portugal, Malta, Greece and Spain.

Apart from new designations, the obligations in place have been reconsidered in several countries, in particular as regards public payphones. The decreasing trend of their usage has led to reductions in density criteria in the Czech Republic, Latvia, and Lithuania. Reductions in this context are further considered in Slovakia and Austria. In contrast, additional mandatory services, such as maritime services, ISDN and leased lines, are provided under the universal service umbrella in Denmark.

The possible inclusion of broadband services within the scope of universal service elements is increasingly becoming a point of interest. Besides France and Spain, other Members States such Cyprus and Romania have initiated considerations in this regard. However, it is only Finland which has so far actually taken concrete measures to initiate a designation procedure for universal service broadband of 1 Mbps. At the same time, the financing of this service foreseen in the legislation, if any, is to be covered by public funds. For further illustration of considerations in this respect, the UK Government announced a 'universal service commitment' to ensure at least 2 Mbps to all users by 2012 with the help of public funding. The Commission is carrying out a public consultation on the future direction of universal service provision in line with the revised framework in the course of 2010.

The financing mechanism envisaged to cover the net cost of universal service provision, where an unfair burden for the designated undertaking was established, entails two options: funding via a sector-specific fund made of contributions from market players, or public funding. A vast majority of Member States foresee the former financing option, while in Finland and Sweden[55] only public funding is envisaged in the legislation. Malta, Portugal and Czech Republic allow both sector-specific funding and public funding.

Several Member States have received new requests for compensation, or are evaluating earlier requests received. Even if the provisions for financing are in place, the financing mechanism for universal service is not activated in the majority of Member States. Such a compensation mechanism has been activated in the Czech Republic, France, Italy, Romania, Spain, Latvia, and Belgium (for social tariffs). In Austria, market players voluntarily pay out compensation to the designated undertaking on the basis of commercial agreements without activating an official compensation mechanism. The net cost calculation and establishment of an unfair burden appears to be a complicated and time-consuming process for the majority of the countries involved. Due to various administrative delays, court proceedings, delays in contributions, or updates of net cost calculation methodologies, compensation is only received by the designated operators in France, Czech Republic, Spain and Romania. Nonetheless, in

[55] Sweden is currently discussing new options for universal service financing.

the Czech Republic, following a court's decision of 2009, the net cost has to be revisited for the period of 2001-2006 as the contributing operators had not been granted the status of a party to the administrative proceeding concerning the net cost calculation. Furthermore, the Romanian compensation mechanism is under scrutiny by the Commission services for compliance with the framework.

Where the net cost figures have been finalised, the total sum has a decreasing trend in most cases. The latest available net cost figures are the following: Belgium € 48.4 million (2003), Czech Republic € 13.77 million (2006)[56], Spain € 71.1 million (2007)[57], Latvia € 0.54 million (2008), Romania € 0.47 million (2008[58]), France € 22.9 million (2007), and Italy € 41 million (2003). The net cost calculations are currently ongoing in Poland, Portugal and Slovakia, to determine whether such costs represent an unfair burden on the designated undertaking. With regard to the process, the Commission recalls the need to take into account all tangible and intangible benefits when determining the net cost, and to maintain a high level of transparency for all parties involved in the compensation mechanism.

Infringement proceedings related to incorrect implementation of universal service provisions were still pending against Belgium, Portugal and Spain. Moreover, the Danish financing mechanism is currently under scrutiny by the Commission services for compliance with the EU framework.

Directory services and directory enquiry services

Comprehensive directories and comprehensive directory enquiry services constitute an integral part of universal service as defined by the Universal Service Directive. These important information/access consumer tools should include information of all subscribers, irrespective whether mobile or fixed, provided that prior subscriber consent was given and all relevant personal data protection rules are respected.

Action towards provision of these services has been taken in some Member States where such comprehensive directories and directory enquiry services were not available in 2008. The Bulgarian authorities report that these services became available in September 2009, but certain improvements are still necessary in order to ensure that subscribers are given the possibility to express their consent for their data to be included in a comprehensive directory. In Romania, a directory and a directory enquiry service have been available since October 2009 under the universal service regime, however, it seems that not all operators assigning telephone numbers have submitted their subscriber database The Commission services are monitoring and assessing the developments with respect to compliance with the regulatory framework. In March 2009, the ECJ ruled that by failing to ensure availability to all end-users of at least one comprehensive directory and directory enquiry service, Portugal failed to fulfil its obligations under the Directive[59]. Although some developments took place in 2009, the infringement proceeding for non compliance with the ECJ judgement is still pending as not all operators have yet supplied their subscribers' data to the universal service provider.

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56 Total of 354 150 460 CZK. The net cost for the provision of special tariffs, covered from the state budget, was set and paid up to 2008 (140 919 808 CZK, € 5.48 million). The finalisation of the net cost for those universal service elements to be covered by the sector-specific fund for years 2007-2008 is pending.

57 The reduction in net cost amount may partly be attributed to use of EU funding for this purpose.

58 Significant reduction in net cost linked to lower spending on telecentres.

59 Case C-458/07.

Where the market delivers the comprehensive directories and directory enquiry services at a satisfactory level, several Member States have taken the decision not to designate a universal service provider for this area. Such is already the case in the Czech Republic, Estonia, Italy, Finland, Ireland and Austria (for comprehensive directory enquiry services) [60]. Most recently, Malta is in the process of reconsidering whether to maintain the provision of printed directories in the scope of its universal service designations.

Besides the provision of comprehensive services, the framework facilitates development of competition for directory-related services by mandating an obligation on undertakings assigning phone numbers to provide relevant subscriber information on fair, objective, cost-oriented and non-discriminatory terms to directory providers. While most of the larger operators provide directory services at least in relation to their own subscribers, competition between numerous service providers continues to develop in several Member States (e.g. Italy, Czech Republic, United Kingdom, Germany, France, Spain, the Netherlands). The 118xxx range of service codes are most commonly used as regards directory enquiry services. Some of the service providers are present in several Member States; some offer in addition to their core service other value added services such as for example call completion by SMS or reverse search.

Concerns have been raised in Bulgaria, where it appears that the development of competition may be constrained as service providers that do not own networks may face difficulties in access to dedicated 118xxx numbers. The Commission services have launched an investigation in this regard. The Court of Appeal in the United Kingdom concluded that the current universal service (wholesale) obligation requiring the designated undertaking to make available its aggregated comprehensive database to alternative service providers on fair, reasonable and cost-oriented terms was invalid but also decided to obtain a preliminary ruling on this point from the ECJ before giving judgement. Similarly, a German Court has referred to ECJ for a preliminary ruling questions related to access to aggregated subscriber data base.[61] Improved access to subscriber information for directory providers has been proposed in amendments of the national legislation in Slovakia and in the Czech Republic.

Users with disabilities and social needs

The Universal Service Directive encourages action on the part of Member States to ensure access and affordability of publicly available telephony services for disabled users, those users on low income and with special needs. The majority of Member States continue to provide special services to this group of consumers and end-users as a part of universal service provision. Most typical measures include reduced tariffs and packages; provision of special terminal equipment, including public payphones; and access to emergency services for different groups of disabled users.

In 2009, only a few developments have been reported in this area. The Czech regulator carried out a new designation of the universal service provider for special terminal equipment. In Latvia, the scope of universal service related to disabled users has been modified so as to provide free of charge installation of new lines, including broadband lines, 75% discount on monthly subscriptions, 20% discount on local calls, and a discount on broadband

60 In addition to Sweden, Germany and Luxembourg where there is no formal designation for any of the universal service elements.

61 C-543/09.

subscriptions. In Spain, the family income threshold was reduced in order to allow more Spanish citizens to benefit from measures targeted at people with special needs. An association of French operators launched a pilot centre for the relay of calls for deaf persons. In Poland, a range of services dedicated to handicapped subscribers is available, including discounts, special bills for the blind, equipment for those with hearing difficulties, as well as a software allowing for the use of a computer by the blinking of an eye.

Overall, the differences in action taken by the Member States in this area remain. More dedicated and targeted efforts would be beneficial to bring the level of choice of providers and services available for disabled people and those with special needs to that enjoyed by the majority of end-users.

Users' access to the Internet and network management

The online economy builds on the availability of innovative services and applications. This highlights the importance of preserving the open and neutral character of the internet. In addition to the regulatory tools available under the market review mechanism, the new framework strengthens transparency requirements and provides the NRAs with powers to set quality of service parameters so as to prevent the degradation of services and the hindering or slowing down of traffic over networks.

So far net neutrality has been identified as an issue in some Member States mainly in the context of mobile operators either preventing access or applying differentiated pricing strategies to VoIP services. Mobile operators do not appear to apply restrictions for access to VoIP services over their networks in many Member States (e.g. Slovakia, Latvia, Hungary, Czech Republic, UK, Malta). In Hungary, operators stated that, in view of the future developments of VoIP, operators may need to reflect on alternative policies for VoIP access. The possibility to make VoIP calls over the mobile access network has become a topic of controversy in Germany. The NRA requested all mobile operators in May 2009 to explain their practices but found no grounds to intervene. All mobile operators reported that they have enabled their customers to use VoIP services – either without restrictions, or (as in the case of the two larger operators) using a dedicated tariff. In the UK, the approaches to mobile VoIP differ among the MNOs – while some apply differentiated pricing depending on whether VoIP is allowed or not, others charge no extra fees. In the Netherlands some net neutrality issues have also been under discussion. Traffic was "squeezed" from heavy Internet users on certain broadband networks while some mobile 3G network operators blocked the use of particular Internet services. Although this now seems to have been provisionally solved by the functioning of the market (i.e. new more expensive offerings including the use of VoIP), the national consumer association requests more transparency from network operators as to the download capacity of the broadband service. The Ministry is preparing a policy reflection on these issues.

There has also been a debate in some Member States with regard to striking a balance between the end-users' rights and the need to protect intellectual property rights. In France, the long discussed provisions on the diffusion and protection of creative content on the Internet (the Hadopi Law) entered into force in November 2009. The new law introduced a suspension of the connection as a sanction for offences related to certain intellectual property infringements. In the UK, the 'Digital Economy Bill' submitted to Parliament provides that copyright owners may notify Internet operators of suspected infringements, which operators then have an obligation to pass on to the subscriber. Furthermore, the Bill provides that the Secretary of State may impose technical obligations on Internet service providers, which

include limitations on the speed or capacity of a broadband connection, preventing access to certain material, suspending the service altogether, or limiting the service in any other way. The details of the procedure will have to be set out in secondary legislation. In Ireland, in accordance with a settlement reached between the incumbent operator and record companies the incumbent will operate a "three strikes" policy meaning that after being supplied with the IP addresses of suspected infringers by the record companies, the incumbent will twice warn infringers that their IP address has been detected as infringing copyright. If these warnings are ignored or unheeded, the incumbent will proceed to disconnect the suspected infringers.

In this respect, the newly adopted regulatory framework deals with measures taken by Member States regarding end-users' access to or use of communications services and applications. It requires in particular that the persons concerned by any such measures are entitled to a prior fair and impartial procedure, including the right to be heard, and have a right to an effective and timely judicial review.

The Commission services will keep, in line with its Declaration to the European Parliament[62], developments under close scrutiny.

Number portability

Number portability allows subscribers to retain their numbers independently of undertakings providing the service. The facility is one of the fundamental instruments reinforcing consumer choice. It enables the fostering of competition, in particular when new players enter the market. The task of the national regulators is to make sure the wholesale pricing is cost-oriented and that retail prices do not act as disincentives to the take-up of number portability. At the same time, appropriate tariff transparency needs to be ensured for those who port their numbers and those who call such numbers.

Number portability is now available in all Member States both for mobile and fixed numbers. Despite the progress notable in the service provision in Bulgaria, number portability is still not provided for fixed numbers connected to analogue exchanges. An infringement proceeding is pending against Bulgaria with respect to fixed number portability.

The key actions of Member States related to number portability in 2009 evolved around the reduction of the time it takes to port a number. Significant shortening of time limits were introduced in several Member States: in Portugal (for mobile numbers) and Netherlands, the time limit to port a number was reduced to three working days, in Slovakia to five working days, and a one day limit for mobile numbers and sevendays for fixed was introduced in Poland. In the Czech Republic, the time limits for inter-operator procedures were shortened. Further reductions of porting time are planned in Greece and Sweden (three days) and Spain (two days). Presently, the scale of differences is still large: from one day to port a mobile number in Malta and Ireland, to 12 days in Greece (on average); and from two days to port a fixed number in Belgium to 15 days in Bulgaria, Italy and Sweden.

Various factors appear to play a role in the take-up of number portability. Besides the time factor, where lengthy timing may discourage from use, other procedures employed by donor and recipient operators vis-à-vis subscribers may also have an influence on the usage. Cumbersome and complicated procedures tend to bear a negative impact on the take-up,

[62] OJ L337/69, 18 December 2009

whereas the solutions provided by one-stop-shops appear to offer the simplest means to number portability from the consumer viewpoint. Engaging in win-back strategies and offers also appears to play a role in some cases. Long-term contracts, large differences between on-net and off-net prices, and high contract termination costs may prevent subscribers from switching to another operator. In response to such issues, in Italy for instance, both the NRA and the competition authority intervened to ensure that mobile operators do not resort to unlawful practices in order to retain customers - significant fines were imposed for anticompetitive behaviour and inappropriate use of subscriber data. In Spain, the NRA allowed the subscribers' verbal consent for porting numbers, verified at a later stage by an independent party.

The retail price is an important and decisive factor. The EU rules stipulate that charges applied to consumers in relation to number portability should not act as disincentives. The retail cost is at zero or at a symbolic level in at least 21 Member States[63].

Prices constitute an important element of number portability also from the wholesale perspective. The wholesale charges are usually negotiated commercially, but in some cases the decision is made by the NRA via disputes. Wholesale prices across the EU vary to a great extent: from zero charge for porting fixed numbers in Estonia, Germany and Lithuania to €33.9 in the Czech Republic and up to €50 in Slovakia; and from zero charge for mobile porting in seven Member States[64] to €20.6 in the Czech Republic and €33.2 in Slovakia. Alternative operators and smaller players have expressed concerns with regard to high wholesale prices in the Czech Republic, Bulgaria, Malta, whilst inter-operator charges were a subject of disputes in Latvia.

Concerns have also been noted in relation to the proper functioning of number portability systems where a central database is not used. (e.g. Luxembourg, Poland). In this context, modifications are planned in Spain in terms of change from a distributed to a centralised system for mobile number portability, although the sharing of the costs still needs to be clarified. In Malta, a solution has been found with respect to concerns on low ceilings for the number of daily portings and the NRA has put forward a proposal to reduce wholesale charges for porting mobile and fixed numbers. In the United Kingdom, concerns have been raised in relation to donor-led systems and indirect routing of calls to ported numbers. The United Kingdom regulator launched a national public consultation proposing solutions to improve the system of number portability. The Portuguese NRA revised the number portability rules in 2009 - as a result, most controversial issues appear to have been resolved; moreover, the regulator has imposed a penalty on the incumbent operator for breaching the national number portability rules.

Number portability is gradually extended beyond the 'traditional' technologies. In the Czech Republic, for example, VoIP providing PATS are now included in number portability systems, and portability has been extended between fixed and mobile networks for certain value-added services. In Belgium, number portability now further includes also nomadic VoIP.

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63 Bulgaria (free for mobile numbers only), France, Luxembourg, Portugal (only mobile except one operator charging business customers), Spain, Malta, Cyprus, Belgium, Netherlands, Latvia, Ireland, Greece, Poland, Italy (mobiles), Lithuania, United Kingdom, Hungary, Czech Republic (except some fixed alternative players), Estonia, Finland, Romania.

64 Germany, Estonia, Spain, France, Italy, Lithuania, Poland.

Transparency is an important aspect of number portability, in particular for Member States where pricing regimes based on on-net/off-net tariffs prevail. In order to facilitate better provision of information to this end, several countries have employed the practise of a 'beep' or a message to inform subscribers of the fact that they are calling a ported number. In this context, it should be noted that while measures to reinforce transparency are valuable and welcome, they should be balanced so as not to create disincentives to use the facility of number portability. Concerns in this regard related to long messages when placing a call to a ported number have been reported in Austria.

Switching of internet providers appears to be a frequent source of complaint in several Member States. However, it appears that in general there are only very few measures in place to streamline and improve the switching procedures. In this context, a public consultation on a single switching procedure is under preparation in the United Kingdom. In the Netherlands, the industry introduced self-regulation of internet providers to enable easy switching for broadband. New rules on switching internet service providers in France allow maintaining the existing e-mail address under the provider's domain during the first six months following the termination of a contract. The Italian NRA was active in facilitating better migration procedures for LLU customers.

Overall, there is still ample scope and potential for a faster and better functioning number portability process. The Commission services are closely monitoring the developments in this respect. The revised EU framework brings forward certain changes facilitating easier and faster change of a provider, inter alia by shortening the time limit to port a number to one working day.

Out-of-court dispute resolution

With a growing number of electronic communications service providers and ever widening range of services offered, often with complex and unclear pricing and contractual conditions, the need for an effective procedure dealing with disputes involving consumers is evident. Member States therefore have the obligation to ensure a simple, transparent and inexpensive alternative to a formal and often lengthy and costly court procedure to deal with consumer disputes.

The sources of the most frequent consumer complaints remain unaltered: billing and payment issues, debt collection, contracts and their cancellation, tariff transparency, early expiry of pre-paid cards, and low quality of service, especially with regard to broadband speed levels. The Spanish consumer associations were in particular concerned about the low quality of operators' customer service quality available via helplines. In some Member States, such as for example Bulgaria and Greece, installation of antennae for wireless transmission appears to raise increasing concerns with respect to electromagnetic levels and health.

The number of consumer complaints in 2009 shows a mixed picture. Several Member States have reported a notable increase of consumer complaints received (Czech Republic, Portugal, Belgium, Spain, Estonia) while others note a gradual decreasing tendency for submission of complaints (Denmark, Austria, Cyprus, Greece, France). In this context, it has been noted that targeted regulation aiming at resolving specific issues of pressing consumer concern, as well as actions taken by the industry, often help to bring the desired effects in terms of increasing consumer satisfaction and resulting in the reduction of consumer complaints in particular areas.

For example, the positive developments in Greece can be attributed to previous actions of the regulator, such as issuing of the Code of Practice for value added services and premium rate SMS and imposing penalties, as well as to improvements in the quality of service offered by market operators in terms of customer care and technical support. Similarly, the legislation adopted in France targeting specific issues of frequent user complaints appears to have facilitated a decline of complaints. In Poland, consumers make a good use of the NRA's services such as the call centre or mediation service for complaints. In the Netherlands and Spain, for example, a 'do not call me' register gives consumers an opportunity to avoid unsolicited commercial calls.

Where two or more national bodies are involved in out-of-court dispute resolution mechanisms, it is important to streamline and coordinate such mechanisms so that overlaps in competence or contradictory decisions are avoided. A need for better coordination between all the different bodies dealing with complaints at national, regional, and local level has been noted in Spain. The Commission services are following the developments on the establishment of a new procedure in Luxembourg, where the current provisions do not seem to effectively implement the out-of-court dispute procedure.

European emergency number 112

Guaranteeing the safety of EU citizens when travelling abroad through the availability of the EU-wide emergency number 112 remained high in the Commission's priorities. The single European emergency number 112 can be dialled to contact emergency services from fixed and mobile phones free of charge from anywhere in the EU. Member States must ensure that citizens are kept informed about the existence and purpose of 112. However, only 25% of EU citizens could spontaneously identify 112 as the number to call for emergency services from anywhere in the EU (a very small increase of one percentage point compared to the previous year) and just 22% had received information about 112 in the last year.

The Commission has actively contributed to raising awareness of 112. In February 2009, the Commission, the European Parliament and the Council declared 11 February as the 'European 112 Day'. On that day, different awareness and networking activities will be organised every year in order to promote the existence and use of 112 throughout the EU.

Furthermore, the amended Roaming Regulation[65], which entered into force on 1 July 2009, provides that citizens using their mobile phone, when travelling to another Member State, should receive an SMS informing them about the availability of 112 for accessing emergency services free of charge. Finally, the Commission launched a website[66] in several languages dedicated to 112 that provides information on when to call 112 and how 112 works across the EU.

The Commission has been closely monitoring the implementation of the EU provisions related to 112 in the Member States. The Universal Service Directive requires that Member States ensure that operators provide emergency services with information to locate people calling 112 from fixed or mobile phones. In 2009, the Commission closed infringement proceedings against the Netherlands and Lithuania for failure to implement the provision of caller location information for 112 calls after the situation was remedied by national authorities. However, an infringement proceeding is still pending against Italy regarding the

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65 EC Regulation 544/2009 of the European Parliament and of the Council of 18 June 2009.

66 http://ec.europa.eu/112

provision of caller location information, where a reasoned opinion was sent in November 2009, following the judgment of the European Court of Justice[67].

There are still some areas for improvement in relation to caller location information. The Commission services are currently investigating the situation in Malta and France. Moreover, in Estonia, Sweden, Spain and the Netherlands, caller location information is not provided for all or some 112 calls made by users of international roaming services. Despite the fact that the majority of Member States reported that mobile users can access 112 when they do not have coverage of their home network by using another available network, several countries indicated that caller location is not provided for those users. Moreover, in Estonia, Hungary, Spain, France and Lithuania caller location information is not provided for all or some fixed 112 calls in cases where the subscribers are not included in directory services and/or have prevented the presentation of calling line identification. The Commission services are looking into these issues.

The regulatory framework also requires that Member States make sure that 112 calls are answered and handled efficiently. In this regard, the Commission launched an infringement proceeding against Italy for not having ensured that the handling and answering of 112 calls is as effective as for calls made to other national emergency numbers. Following some positive developments, the case was recently closed. Moreover, some problems in transferring 112 calls to the appropriate emergency service have also been reported in France. The Commission services are following this issue.

The Commission has continued to receive a number of complaints regarding the treatment of 112 calls in foreign languages. The possibility for operators to answer 112 calls in more than one language is essential for the efficient functioning of the emergency response, especially when called by citizens travelling to other EU countries. However, it depends very much on the situation in each specific country and region, as responsibility for the organisation of the emergency services overall and language capabilities in particular rests with the Member States.

The EU provisions on 112 have been strengthened following the adoption of the revised regulatory framework, in particular regarding quicker provision of caller location information to the emergency authorities, awareness raising for travellers, extended access obligations to certain types of Internet telephony providers and improved access for disabled users.

In particular, the revised regulatory framework states that competent regulatory authorities must lay down criteria for the accuracy and reliability of caller location information. In this regard, Bulgaria has adopted specific requirements for accuracy of caller location information for mobile calls to 112: a maximum of 100 meters in towns and villages and 1 km in other areas.

The Commission has been promoting Member States' cooperation and exchange of 112 best practice concerning this issue and other issues related to the good functioning of 112 through different expert bodies, such as the Communications Committee and the Expert Group on Emergency Access, and it is also working to make 112 more accessible for all citizens by financing research projects. The Commission will continue to work very actively in order to

[67] C-539/07.

ensure that the single European emergency number is available and known by citizens across the EU.

Must carry

Pursuant to the Universal Service Directive, Member States may impose reasonable "must carry" obligations for the transmission of specified broadcast channels and services on the network operators under their jurisdiction, for legitimate public policy reasons. However, such obligations should only be imposed where they are strictly necessary to meet clearly defined general interest objectives, and should be proportionate and transparent. Furthermore, these obligations shall only be imposed where a significant number of end-users use these networks as their principal means to receive radio and television broadcasts. Member States must review these "must-carry" obligations on a regular basis.

In some Member States must-carry obligations have been extended to digital terrestrial platforms (Ireland, Malta and Portugal), and to mobile television (France). These must-carry obligations are generally limited to public broadcasters and/or some regional or local channels. The introduction of digital transmission has furthermore allowed Member States to restrict the must-carry obligations imposed on the cable network operators (the Netherlands).

Finland is currently considering introducing the obligation to transmit additional services, such as subtitling and subtitles-to-speech, which should facilitate the viewing of television broadcasts by disabled people and immigrants.

The Commission was able to close ongoing infringement proceedings against the Netherlands and Germany in 2009. In the Netherlands, new must-carry obligations imposed on digital networks were limited to a certain number of public service broadcasters and regional channels. As regards Germany, by its preliminary ruling of December 2008, the European Court of Justice had clarified, with regard to the "must carry" rules of the Land of Lower Saxony, that the relevant Universal Service Directive provisions do not preclude national legislation from requiring a cable operator to carry over its analogue cable network certain channels and services provided that those obligations do not give rise to unreasonable economic consequences, which is a matter for national courts to establish[68].

In October 2009, the Commission decided to take Belgium to Court for not having changed the existing “must carry” legislation for the bilingual region of Brussels-Capital. Contrary to the requirements of the Universal Service Directive, the procedure for the designation of "must-carry" channels lacks transparency, which makes it also difficult to assess the proportionality of the obligations imposed.

ePrivacy

The ePrivacy Directive[69] particularises and complements the general Data Protection Directive[70] in the area of electronic communications. It provides for basic obligations to

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68 Judgement of 22 December 2008, C-336/07, Kabel Deutschland Vertrieb und Service, not yet published.

69 Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (OJ L 201, 31.07.2002, p. 37).

ensure the security and confidentiality of communications over EU electronic communications networks, and gives consumers a set of tools to protect their privacy and personal data.

Implementation and enforcement

A study on enforcement activities against spam, spyware and malicious software published by the Commission in October 2009[71] found that although in recent years several EU countries have taken measures to enforce Europe's ban on spam, including fines for spammers, the number of prosecuted cases and sanctions imposed on lawbreakers vary considerably. Also it has become clear that the national competent authorities have not taken sufficient action to enforce the ban on spyware and malicious software.

The study confirms the need for legislative improvements included in the revised regulatory framework: clearer and more consistent enforcement rules and dissuasive sanctions, better cross-border cooperation, and adequate resources for national authorities in charge of protecting citizens' online privacy.

On an international level the European Commission is negotiating an agreement with the US on cross border cooperation in the enforcement of consumer protection laws. Industry figures show that one in six spam e-mails are sent from the US. On the basis of the revised rules, cooperation on spam will be included in the scope of the EU-US agreement.

Enforcement policies over the Internet raised the issue of the complex balance between privacy and other interests, such as intellectual property rights, business secrets or national security.

In France, a law on the diffusion and protection of Internet content was adopted in 2009 which allows agents of the newly created anti-piracy agency to obtain from electronic communications operators any information relating to the traffic on their networks, in particular personal data of the clients whose Internet connection was used for unauthorised diffusion of copyright protected elements. In the UK, the draft Digital Economy Bill presented by the Government to Parliament provides for the possibility for rights owners to make copyright infringement reports to the Internet service provider, which would be required to notify them to the subscribers infringing copyrights. The right owners would also be able to apply to the court to learn the subscriber's identity and to bring proceedings against the subscribers for copyright infringements. Finally, the High Court in Austria decided that Internet service providers cannot be forced to give personal details of their subscribers to rights holders with a view to enforcing copyrights without a Court order.

The Finnish law was amended to enable employers to examine the traffic data of employees' e-mail messages in cases of alleged breaches of business secrets. Companies can also get access to information concerning the size of the e-mails and whether or not any documents were attached. Access to the content of the messages as such was not allowed.

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70 Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (OJ L. 281, 23.11.1995, p. 31).

71 http://ec.europa.eu/information_society/policy/ecomm/doc/library/ext_studies/privacy_trust_policies/spam_spyware_legal_study2009final.pdf

In view of combating terrorism, the Greek government adopted legislation on the identification of users of mobile telephony equipment and services. Subscribers not providing correct details are subject to criminal liability. After July 2010 any anonymous SIM cards will be blocked. A similar registration requirement for mobile prepaid users was implemented in Spain. In November 2009, prepaid customers that had not been registered were temporarily disconnected, although they can still be re-connected in case they register by May 2010.

Confidentiality and security

Marketing techniques using electronic communications have been the subject of specific attention in 2009. Following complaints to authorities on the use of behavioural advertising technology, the Commission launched an infringement proceeding against the UK concerning incorrect transposition of EU rules on confidentiality of communications provided in the ePrivacy Directive and the Data Protection Directive related to user consent, sanctions in case of infringements and lack of an independent authority to supervise interception activities. Following the analysis of the UK authorities' response to the letter of formal notice, the Commission took the case to the second phase by sending a reasoned opinion.

In Italy, databases have been set up for telemarketing purposes on the basis of public subscriber directories. They include personal data where no explicit consent for the use of this information had been granted by the individuals concerned. The use of these databases was allowed until 31 December 2009 and prolonged for a further six months. The Commission services are currently looking into the matter.

Some Member States are taking measures to ensure the integrity and security of electronic communications. For instance, Malta announced plans to set up a National Information Security Agency, the operations of which are expected to commence in early 2010. In Sweden, SAMFI, a collaboration group, coordinates cooperation between governmental bodies within the information security field. The group consists of the Swedish Defence Materiel Administration, the National Defence Radio Establishment, the Swedish Armed Forces, the Swedish Civil Contingencies Agency (MSB), the Swedish Police, SITIC and the Swedish Administrative Development Agency.

Member States are also taking steps towards raising consumer awareness about online security risks. The Dutch NRA requires information on the security risks posed by the Internet to be actively provided to consumers by Internet service providers. In Sweden, an interactive education tool on Internet security is run by the national regulatory authority whereas the Swedish consumer protection office provides advice to consumers on spam and Internet security. In Spain, the national data protection authority issued some recommendations on data protection and participated in the introduction of a Robinson list, which is a list of people who opt not to receive direct marketing communications.

Data protection and privacy principles laid down in the EU rules apply also to those public electronic communications networks and services which are used to support data collection and identification devices. In order to provide guidance on the design and operation of RFID applications in a lawful, ethical and socially and politically acceptable way, respecting the right to privacy and ensuring protection of personal data, the Commission adopted in May 2009 a Recommendation on the implementation of privacy and data protection principles in

such applications[72]. Follow-up work to the Recommendation includes the preparation of a framework for privacy impact assessments by industry stakeholders. The Recommendation also calls for the development of schemes that can demonstrate that an appropriate level of information security and protection of privacy is established in relation to the assessed risks connected with an application.

Data retention

Ireland's challenge[73] of the legal basis for the Data Retention Directive was rejected by the European Court of Justice in February 2009.

In connection with the non-communication of transposition measures for the Data Retention Directive, the Commission sent a reasoned opinion to Luxembourg and referred five cases to the European Court of Justice (Austria, Greece, Ireland, the Netherlands and Sweden) in 2009. Whereas two of these cases were closed following the notification of respective national transposition measures (the Netherlands and Poland) the European Court of Justice in November 2009 condemned Greece and Ireland[74] for not transposing the Directive. The Commission is monitoring what measures are taken by these two Member States to comply with the judgment. In addition, in December 2009, there were four infringement cases pending related to the non-communication of transposition measures for the Data Retention Directive (Austria, Luxembourg, Romania and Sweden). In Portugal, national legislation transposing the Data Retention Directive finally entered into force in August 2009.

In several Member States national legislation transposing the Data Retention Directive was challenged before national Courts. In Bulgaria, the Supreme Administrative Court annulled certain provisions of the national law (adopted in January 2008) concerning the rules for access to the retained data by the relevant authorities. In Romania, the national act implementing the Directive was found to be in breach of the Romanian constitutional principles in October 2009. In Germany, there were numerous constitutional complaints pending against the provisions on data retention at the end of 2009. The implementing legislation was challenged before the Constitutional Court also in Hungary where the case is still pending.

The Commission's expert group on data retention held two meetings in 2009 to discuss technical issues related to the interpretation of the Directive. Furthermore, the Commission organised two meetings to report about the work of the expert group related to the interpretation of the Directive and to take stock of the implementation of the Directive by the Member States.

A stakeholder conference in May 2009, kicked off the preparation process for the evaluation of the Directive. The Council has asked the Commission to include in the evaluation report information about legislative and non-legislative measures or technical solutions applied by Member States to help law enforcement authorities to better identify users of electronic communications services, such as registration of prepaid mobile services, in this evaluation report, which is due on 15 September 2010.

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72 Insert reference
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HORIZONTAL REGULATION

Administrative Charges

The EU regulatory framework expressly restricts the amount of administrative charges that may be imposed by NRAs to the administrative costs resulting from their regulatory work, such as management, control and enforcement of the general authorisation scheme and of rights of use. Appropriate adjustments also need to be made in the light of the difference between the total sum of the charges and the administrative costs. Systems for administrative charges should not distort competition or create barriers to market entry. The European Court of Justice has consistently maintained that administrative costs must relate to the regulatory activities provided by the framework[75][76].

In 2009, the Commission services were looking into several issues related to administrative charges. In particular, in Germany and Bulgaria, the persisting absence in the NRA's annual report of a yearly overview of the administrative charges collected as compared to costs does not seem to allow a verification if any adjustment of the administrative charges is necessary. In Lithuania, the surplus in administrative charges collected by the NRA was transferred to the state treasury in 2009. While the recurrent surpluses accounted for by the Belgian NRA are systematically transferred to the State treasury, operators are required to contribute to new funds, such as the fund for the management of the social tariffs database and the fund for emergency services. An infringement procedure was launched against Latvia over concerns that a radical increase of the administrative charges for certain services provided by the Electronic Communications Office as well as the discounts granted to some categories of undertakings did not comply with the EU framework. These issues highlighted the absence of a clear methodology for allocating administrative costs between the various tasks carried out by this regulatory authority. On the other hand, the administrative charges collected by the other Latvian national regulatory authority was reduced for 2009 following an annual adjustment, and in Cyprus plans to simplify the method used for the calculation of administrative charges were announced. New legislation has also been proposed by the Spanish Government, which is set to reduce the administrative charges from 1.25‰ to 1.00‰ as of 2010.

In Portugal, following the restructuring of the system for administrative charges, the universal service provider is, reportedly excluded from paying administrative charges on some of the revenues derived from the provision of universal service.

Moreover, in France and Spain reforms of financing arrangements for public broadcasters linked, in particular, to the suppression of advertising on public television resulted in the imposition of specific taxes on the revenues of providers of electronic communications networks and services. In France, all the electronic communications operators are liable to the

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75 See in particular joined cases i-21 Germany GmbH (C-392/04) and Arcor AG & Co. KG (C-422/04) and joined cases Albacom SpA (C-292/01) and Infostrada SpA (C-293/01).

76 On the other hand, a tax on mobile and personal communications infrastructures used to carry on activities provided for in licences and authorisations, which applies without distinction to national providers of services and to those of other Member States, and affects in the same way the provision of services within one Member State and the provision of services between Member States, does not fall within the scope of application of the rules on administrative charges. See in particular joined cases Mobistar SA (C-544/03) and Belgacom Mobile SA (C-545/03).

charge of 0.9% of total retail revenues exceeding €5 million. The Commission has sent a letter of formal notice to France in this respect. In Spain, broadband, mobile and fixed operators, which provide services in more than one region that may include advertising, are subject to the charge of 0.9% of gross revenues, excluding wholesale revenues. An issue is whether such taxes may at all be imposed on operators in their capacity as authorised providers of electronic communications networks or services. The Commission's services are looking into the issue.

Rights of way and facility sharing

The regulatory framework provides that rights to install facilities should be granted in a timely, non-discriminatory and transparent manner. Moreover, when competent authorities are considering an application for rights of way, the authority in question should act without delay. In cases where public or local authorities retain ownership or control of undertakings operating electronic communications networks and/or services, there shall be effective structural separation between the function of granting rights of way, and the function associated with ownership or control. Importantly, any fees for rights of way should be objectively justified, transparent, non-discriminatory and proportionate, and should not distort competition or create barriers to market entry.

As a general rule, a range of different laws and regulations concerning civil works, town planning, environment, public health and general administration affect the procedures for granting of rights of way and the roll-out of networks. For example, in Belgium, the Regions have competence for environmental and health aspects of antennae for mobile telephony. As a consequence the three Regions are issuing their own norms for electromagnetic field exposure. Administrative procedures involve numerous competent authorities depending on whether requests for access rights relate to public or private property. The procedures also depend on the type of infrastructure for which requests have been submitted. Roll-out and maintenance of underground networks seems to be less problematic than the installation and sharing of masts and antennae, to which stricter environmental and public health protection rules are applied. Lastly, procedures also depend on whether requests for permits concern deployment of new networks or whether they merely relate to access to existing networks.

In 2009, new legislation was adopted or was under preparation in some Member States in the area of rights of way and facility sharing. In Cyprus, the long-awaited Ministerial Order providing for the exemption of certain mobile telephony stations for obtaining building permits when installed on existing licensed antenna masts, and the specifications of certain deadlines for the processing of applications was adopted in June 2009. In Romania a draft law on infrastructure is being prepared. With this proposal, the Romanian authorities seek not only to establish a new regime for infrastructure sharing but also to set a clear prohibition for granting exclusive or special rights for the installation or development of electronic communications networks. In Latvia, amendments to the Code of Administrative Offences were adopted in May 2009 providing for sanctions in case of breaching the rules governing installation of telecoms facilities. In Lithuania, a draft law to limit the construction of mobile antennas on top of residential and educational buildings was tabled at the Parliament. In June 2009, the Greek NRA issued a Regulation on the right of ways' fees and usage, which, however, is not yet enforceable. In Bulgaria, on the contrary, important secondary legislation with respect to the construction of mobile networks is still missing.

Numerous issues have been reported in connection to network deployment activities in an increasing number of Member States (e.g. Belgium, Cyprus, Greece, Ireland, Spain, Hungary, Italy, Lithuania, Slovenia), the most difficult cases still relating to acquisition of building

permits for installation of mobile antennae. This has been in some instances due to cumbersome administrative procedures (e.g. Greece, Spain), which led to systematic delays in granting rights of way. In Belgium, the delayed adoption of implementation measures in the Flemish and the Brussels Region has led to a moratorium in the delivery of building permits for antennae. In Spain, even dismantling of mobile antennae in some regions and municipalities was reported. In Cyprus, a local municipality repeatedly refused to issue a building permit to an alternative operator, thus preventing the landing of a new sea cable.

Moreover, concerns have been expressed by mobile operators regarding difficulties in erecting mobile masts because of increasing public apprehension over environmental and health issues. In Denmark mobile operators have expressed concerns about difficulties in obtaining permits for erecting masts and antennae in the municipalities due to potential health implications related to radiation which may delay future development of mobile broadband. In France, following a shift in public opinion, a working group composed of operators and experts was created in 2009, in order to carry out research into the effects of mobile networks' electromagnetic waves on human health. In Cyprus, the Ministry responsible for frequency management held a series of meetings with local municipalities authorised to grant rights of way, in an attempt to address public health concerns on radiation from mobile networks.

In certain Member States (e.g. Malta, Italy) high fees and associated costs for rights of way are matters of concern. In 2009, following a decision of the Spanish Courts, mobile operators may be charged for the use of installed facilities in the public domain. The payment of these charges is being requested by an increasing number of local authorities, but only in relation to the use made of the public domain. In Greece, local authorities were reported to be charging fees arbitrarily.

Facility sharing can be of benefit for town planning, public health, public security or environmental reasons. To this end NRAs should encourage voluntary agreements in this area. In cases where undertakings are deprived of access to viable alternatives, compulsory facility or property sharing may be appropriate.

In order to facilitate the development of next generation networks new legislation was adopted in Slovenia and Portugal, which regulates access to infrastructure-based utilities such as highways, railways, electricity and gas pipe lines. Similar developments were reported in other Member States. The Polish Parliament, for example, is discussing a similar draft law. In Austria, an amendment of the national law, which mandates the owners of rights of way to provide access to electronic communications operators as long as it is financially viable and technically possible, was adopted in June 2009. Based on these amendments, the Austrian NRA adopted a decision in November 2009, ordering the Austrian railways operator to offer access to a certain cable duct to an alternative ISP.

Moreover, specific legislation to facilitate fibre deployment in buildings has been adopted or is in the adoption process (e.g. France, Spain, Poland).

SPECTRUM MANAGEMENT

Digital dividend

In 2009, the Commission stepped up efforts aimed at coordinating the allocation of the digital dividend – high-quality radio spectrum freed as a result of switch-over from analogue to

digital television broadcasting – for innovative wireless communication services across Europe. In particular, in October 2009 the Commission adopted a Communication on how to transform the digital dividend into social benefits and economic growth[77] - and a Recommendation facilitating the release of the digital dividend in the European Union[78]. Completing the switchover from analogue to digital broadcasting by 1 January 2012 and elaborating harmonised conditions of use in the EU of the 790-862 MHz sub-band for electronic communications services other than, and in addition to, broadcasting services are the two immediate regulatory actions recommended by the Commission. The Commission also set out longer term proposals to further improve the quality and size of the digital dividend and is now seeking the political support from the Council and the European Parliament in order to follow-up with concrete actions.

Independently, a number of Member States also announced strategic orientations for the future use of the digital dividend, in particular with the aim of opening up the upper part of the digital dividend (the 800 MHz band) for wireless broadband and advanced electronic communication services (Denmark, Estonia, France, Germany, the UK, Spain). A few Member States went even further and announced their intentions as regards the assignment of the digital dividend: auctions of the digital dividend spectrum will, reportedly, be held in 2010 in Germany, France, the UK and Sweden. Denmark announced that the digital dividend will be used for purposes other than broadcasting, in particular for mobile broadband. In Italy, a public consultation on the plans to assign the digital dividend spectrum to digital television operators and, in a separate procedure, to providers of mobile television services was carried out.

There are however regulatory authorities in a number of Member States that expressed serious concerns regarding the possibility to ensure an efficient and/or timely use of the digital dividend due to cross-border interference and coordination issues, mostly with neighbouring non-EU countries. Member States having expressed these issues include Hungary, Finland, Estonia, Latvia, Lithuania, Luxembourg, Portugal and Malta. This problem suggests that a common EU position may be required to ensure that all Member States can enjoy similar benefits and to improve the chance of successful technical negotiations with the non-EU countries concerned.

Spectrum liberalisation and refarming

In 2009, Member States took steps towards the introduction of market-based approaches in their spectrum management practices. In particular, the new act allowing secondary trading and a technologically neutral use of spectrum was adopted by the Danish Parliament.

In September 2009 a Directive amending the GSM Directive on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community[79] was adopted. It provides for the introduction in the 900 MHz band of new wireless services, starting with UMTS services, and should be implemented by Member States by 9 May 2010.

By the end of 2009, several Member States had taken concrete regulatory action to allow the use of 900 MHz and 1800 MHz frequency bands for services relying on technologies other

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77 See COM/2009/0586 final.
78 OJ L 308, 24.11.2009, p. 24.
79 OJ L 274, 20.10.2009, p. 25.

than GSM. Relevant final decisions had been adopted in Denmark, Finland, Sweden, France, Germany and Latvia. Refarming plans had been announced in the UK, Ireland, Cyprus, Lithuania, Poland, Italy, Austria, Romania, Portugal and Malta.

The Directive also requires that Member States examine whether the existing assignment of the 900 MHz band to the competing mobile operators in their territory is likely to distort competition in the mobile markets concerned and, where justified and proportionate, to address such distortions in accordance with Article 14 of the Authorisation Directive[80].

Most measures adopted until now to address such distortions have consisted in redistributing part of the spectrum among operators. In Italy, a competitive selection process resulted in redistribution of some frequencies to an existing operator in view of the planned liberalisation of the 900 MHz / 1800 MHz frequency bands. In contrast, Sweden has approved redistribution of some 900 MHz frequencies to an existing 3G operator without a tender. The Commission services are looking into the matter. A decision regarding redistribution of some frequencies in order to accommodate a new operator in the 900 MHz and 1800 MHz frequency bands was adopted in Denmark. Moreover, caps on spectrum holdings or national roaming arrangements used or planned by some Member States for the new spectrum assignments are relevant in this context as measures reducing the potential for competitive distortions.

The Commission services will closely follow the implementation of the GSM Directive in the Member States. Spectrum allocation and assignment should take into account the evolution towards a more technology neutral spectrum usage and the increased variety of uses allowed by innovation. This "refarming" process creates new business opportunities but may, as a side effect, distort competition between operators (existing or new). National authorities are under an obligation to allocate and assign radio spectrum in an objective, transparent, non-discriminatory and proportionate manner and should not freeze competition in a market to the benefit of incumbent operators when spectrum is reallocated or reassigned. The Commission attaches particular importance to the effect on competition of the opening of several bands at the same time, such as the 800 MHz and 900 MHz bands. A coherent approach is necessary at national level when these bands are opened, in order to ensure that greater technological and service flexibility benefits consumers and does not negatively affect competition.

Assignment of spectrum

In 2009, two trends concerning spectrum assignment practices became more pronounced than in previous years. Firstly, technology and/or service neutral assignment of spectrum was either carried out or contemplated by many Member States, including Sweden, Cyprus, Denmark, Netherlands, Portugal, Germany and the UK. Secondly, some Member States, including Finland, Germany, the UK, Italy, Sweden, Portugal and France, were devising measures aimed at prevention of monopolisation of radio spectrum, such as caps on spectrum holdings or fees enhancing efficient use of spectrum, in particular in the context of the planned digital dividend assignments.

Several Member States proceeded to assigning new individual rights of use for mobile communication services or announced plans to that effect in 2009. In particular, the French

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[80] This Article provides, inter alia, that the rights, conditions and procedures concerning general authorisations and rights of use or rights to install facilities may only be amended in objectively justified cases and in a proportionate manner.

NRA decided to assign the fourth mobile licence to a subsidiary of an alternative operator, which is active in the broadband market. The Belgian government adopted a political decision to issue the fourth UMTS licence. The auction is expected to take place in the first half of 2010. Moreover, 2G mobile licences were extended in Belgium. In the Czech Republic, amendments to the national frequency allocation table were set to increase the number of rights of use to four in the 1800 MHz spectrum band, creating the possibility for the entry of a new market player. The tender for these frequencies is expected to be initiated in 2010. Based on rights of use already granted, third operators launched 3G mobile services in Belgium and Malta in 2009. Finally, in December 2009 4G/LTE mobile services were launched by a Swedish operator in Stockholm and Oslo.

2009 was also marked by the regulatory steps in some Member States to assign radio spectrum for wireless broadband services. In April 2009, the Austrian NRA conducted a tender for 3.5 GHz frequency rights of use, which were assigned to four operators. In Slovakia, further authorisations were granted by the NRA for the provision of local fixed wireless access networks in the 10 GHz spectrum band in seven municipalities. Plans for similar assignment procedures were announced or are on-going in Belgium, Denmark, Cyprus, Spain and Portugal. In November 2009, the Finnish NRA auctioned rights of use for the 2500-2690 MHz band, primarily reserved for 4G wireless broadband. The winning bids were submitted by three existing mobile market players (LTE networks) and a new network operator (WiMAX network). On the other hand, a WiMAX tender for the 3.6-3.8 GHz radio frequencies failed in Romania in 2009. Moreover, problems with deployment of previously authorised WiMAX networks were experienced in Italy and France.

Mobile satellite services (MSS)

At the EU level, following the adoption by the European Parliament and the Council in June 2008 of a Decision on the selection and authorisation of systems providing mobile satellite services (MSS)[81], a Community procedure for the common selection of operators of mobile satellite systems that use the 2 GHz frequency band was launched in August of the same year and was completed on 13 May 2009 by way of Commission Decision on the selection of operators of pan-European systems providing mobile satellite services (MSS)[82]. This Decision led to the selection of two operators and the identification of two times 15MHz to each of them. Implementation of the pan-European MSS framework is now the responsibility of Member States. The Commission services will closely monitor measures taken at national level and will assist Member States as appropriate.

Implementation of spectrum harmonisation Decisions

While most of the radio spectrum harmonisation Decisions adopted until 2008 were implemented by the majority of Member States, for some Decisions this was not yet the case. In January 2010, the Commission launched an infringement against Bulgaria for not having implemented the 169MHz Decision[83]. The implementation of the ultra-wide band equipment Decision[84] was not yet ensured in Romania, the Decision on spectrum use for mobile

81 OJ L 172, 2.7.2008, p. 15.
82 OJ L 149, 12.6.2009, p. 65.
83 Decision 2005/928/EC on the harmonisation of parts of the 169 MHz frequency band.
84 Decision 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community (UWB).

communication services on aircraft[85] in Belgium and Spain and the short-range devices Decision[86] and the169,4-169,8125 MHz frequency band Decision[87] in Spain. Moreover, the implementation of the information regarding spectrum use Decision[88] is still under way in a number of Member States and the Intelligent Transport Systems Decision[89] was yet to be implemented in Austria (temporary derogation granted until 31 December 2011), Belgium, Spain, Netherlands, Poland and Sweden.

Regarding two Decisions that concern spectrum suitable for wireless broadband services[90] the Commission services sought clarifications and additional information as regards completeness and correctness of implementation from several Member States. Such information is being assessed by the Commission services. Moreover, in October 2009 an infringement procedure was launched against Germany due to its failure to correctly implement the 2500-2690MHz Decision by including restrictions in the national frequency allocation ordinance with respect to the use of fixed wireless services in the 2500-2690 MHz frequency band.

In 2009, three spectrum harmonisation Decisions were adopted by the Commission related to the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community, to the harmonisation of the radio spectrum for use by short-range devices and the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community. The process of verification of the state of implementation of the Decisions adopted in 2009 is on-going.

The Commission services will also continue to closely monitor the completion of the implementation of all radio spectrum harmonisation Decisions.

MONITORING AND ENFORCEMENT

Enforcing effective implementation of the regulatory framework for electronic communications continued to be a priority in 2009. The Commission opened some 170 infringement proceedings under Article 258 of the Treaty on the Functioning of the European Union (TFEU) (formerly Article 226 of the EC Treaty) from the date of application of the regulatory framework until the end of 2009. In around 110 cases this was due to failures to correctly implement the regulatory framework. While all Member States have been concerned by enforcement action, a significant number of issues have been settled since.

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85 Decision 2008/294/EC of 7 April 2008 on harmonised conditions of spectrum use for the operation of mobile communication services on aircraft (MCA services) in the Community.

86 Decision 2008/432/EC of 23 May 2008 amending Commission Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices (SRD).

87 Decision 2008/673/EC of 13 August 2008 amending Decision 2005/928/EC on the harmonisation of the 169,4-169,8125 MHz frequency band in the Community.

88 Decision 2007/344/EC on information regarding spectrum use.

89 Decision 2008/671/EC of 5 August 2008 on the harmonised use of radio spectrum in the 5875 - 5905 MHz frequency band for safety related applications of Intelligent Transport Systems (ITS)

90 Decision 2008/411/EC on the harmonisation of the 3400 - 3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community and Decision 2008/477/EC on the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community.

In line with the Commission Communication 'A Europe of Results – Applying Community Law'[91], the Commission services have also focused on preventing infringement proceedings, by providing general guidance on transposition requirements in the comitology committees and by using intensive bilateral contacts with the relevant national authorities. Both infringement priorities and preventive work will develop further as a consequence of the newly adopted regulatory framework.

In 2009, infringement priorities focused on structural issues and consumer protection. Structural issues included in particular the functioning and the independence of the national regulatory authorities; increasing attention was also been paid to the full application of the Community consultation procedure involving national regulatory authorities and the Commission which aims to consolidate the internal market for electronic communications (Article 7 procedure). A second priority concerned the protection of consumer rights, with a special focus on the functioning of the European emergency number 112, and, increasingly, consumer privacy. Finally, compliance with judgments of the Court of Justice was also prioritised.

In the course of 2009 the Commission opened eight new proceedings, while three pending cases were taken to the second phase with the sending of a reasoned opinion to the Member States concerned. Moreover, the Commission decided to refer two cases to the Court of Justice. At the same time, the Commission decided to close fourteen proceedings following action by the Member States. At the end of 2009 there were 23 proceedings for incorrect implementation pending.

New proceedings opened in 2009 focused on the independence of the national regulatory authorities (Romania and Slovakia), administrative charges for controlling the usage of the radio spectrum (Latvia), fixed number portability (Bulgaria), lack of notification of mobile termination rates (Germany), non-implementation of the Commission Decision on 2.6 GHz spectrum harmonisation (Germany) and confidentiality of electronic communications (United Kingdom). With regard to the latter case, the Commission decided to proceed with the second phase of the procedure and sent a reasoned opinion to the United Kingdom. Two other reasoned opinions, concerning structural separation of regulatory functions from activities associated with ownership and control in state-owned communications and network providers, were sent to Latvia and Lithuania.

Two cases which the Commission decided to refer to the Court of Justice in 2009 concerned the designation of the universal service provider in Portugal[92] and must-carry rules on cable networks in Belgium.

The Commission welcomed the progress made by Member States, even after the initiation of infringement proceedings, and continued to apply its policy of closing cases as soon as the problems were resolved. In 2009, thus, a total of fourteen cases were closed following progress in the implementation process. As the European emergency number 112 became available in Bulgaria at the end of 2008, the relevant case was closed by the Commission. Four cases were closed following the introduction of effective caller location information for 112 in Romania, Slovakia, the Netherlands and Lithuania. The Commission also closed two cases relating to must-carry rules (the Netherlands, Germany). A case against Luxembourg

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91 COM(2007) 502, of 5 September 2007.

92 C-154/09.

concerning structural separation of regulatory and managements functions was closed as the issues raised by the Commission were resolved. As the appropriate steps were taken by national authorities, the Commission closed a case against Cyprus relating to rights of way as well as a case against Sweden relating to the right to appeal decisions of the regulator. Finally, following the changes made in national law, the Commission was able to close four cases against Poland. These concerned the independence of the Polish regulator, consumer contracts, the obligation for operators to negotiate interconnection and the obligation to carry out market reviews.

On the other hand, not all the Member States have complied with the regulatory framework following infringement proceedings, and in 2009 the Court of Justice ruled in four cases. It found breaches of EU law concerning the definition of a subscriber in Poland[93], lack of comprehensive directories of subscribers in Portugal[94], non-availability of caller location information for calls to 112 in Italy[95] and regulation of new markets in Germany[96]. The Commission closely followed whether the judgements of the Court of Justice were fully complied with. In several instances the Commission had to take the procedure to the next phase under Article 260 TFEU (formerly Article 228 EC) which allows imposing financial sanctions on Member States that have not complied with a judgement of the Court of Justice. In particular, letters of formal notice under Article 260 TFEU were sent to Poland, Portugal, Italy with regard to the above-mentioned judgements, and to Lithuania (with regard to a judgement delivered in 2008). Whereas the case against Italy was taken to the next phase with the sending of a reasoned opinion, the Commission was able to close the case against Lithuania as the issues were resolved.

The Commission has continued to issue press releases at each stage of the proceedings opened.[97]

93 Insert reference
94 C-458/07.
95 Insert reference
96 C-424/07
97 http://ec.europa.eu/information_society/policy/ecomm/implementation_enforcement/index_en.htm

ANNEX 1

IMPLEMENTATION IN THE MEMBER STATES

AUSTRIA

INTRODUCTION

The Austrian electronic communications market remains characterised by strong dynamism in the mobile sector. Fixed to mobile substitution continues to grow and mobile operators are innovating and competing strongly by offering attractive retail packages to consumers. Mobile broadband services continue to be very popular and mobile broadband penetration is one of the highest in the EU; it has been considered that, under current market circumstances for residential customers, mobile broadband is a substitute to fixed broadband services, despite possible technical or capacity constraints. Against the success of mobile services, the fixed sector in Austria is facing important challenges; the size of fixed voice markets continues to decrease, the market share of the incumbent operator in the fixed broadband market has been increasing over the past two years mainly due to its bundled offers and there is a decline of alternative fixed infrastructures largely to the benefit of mobile broadband. The development of next generation access (NGA) networks has the potential to influence considerably the current situation between fixed and mobile services in Austria.

Legislative provisions have been introduced to facilitate the deployment of NGAs and with the next round of market analysis it is essential that the National Regulatory Authority (NRA) establishes an appropriate regulatory approach towards NGA, in a timely manner, to introduce further dynamism and enhance competition in the fixed market and eliminate the shortcomings that have been present in the past. The future use of the Digital Dividend in Austria is also currently one of the major policy issues at stake, and it is necessary that the debate and the decision making process on this issue advance rapidly, with sufficient transparency and legal certainty for the sector, which are crucial to enable operators to plan and advance in their future investments.

REGULATORY ENVIRONMENT

Main regulatory developments

Following the adoption of the new Telecommunications Market Ordinance in December 2008, the NRA continued to proceed with the third round of market reviews. While some markets have been deregulated, competition is not yet effective in other markets which had been removed from the Recommendation on Relevant Markets[98] and they continue to be defined by the NRA as relevant for ex ante regulation.

In this respect, the NRA withdrew existing regulatory obligations in the retail calls markets for residential customers, the transit market and some submarkets for wholesale terminating segments of leased lines. On the other hand, the NRA defined as susceptible to ex ante regulation the market for national and international calls markets for business customers as well as the market for broadcasting transmission services, which was divided in three submarkets.

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[98] Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services OJ L 344, 28.12.2007, p. 65-69

After the annulment by the Austrian Administrative Court in December 2008 of the previous market analysis for wholesale broadband access, the NRA notified a new decision where, on the basis of substitution at the retail level between fixed and mobile broadband services for residential customers, it only proposed to define for the purposes of ex ante regulation the market for wholesale broadband access for the subsequent use of business customers. This decision will imply the deregulation of the wholesale broadband access market for the subsequent use of residential customers. The Commission initiated a second phase investigation and, in December 2009, decided to accept with comments the draft measure proposed by the NRA, taking into account the evidence provided and the particular circumstances in Austria.

In addition, several important decisions have been adopted in respect of call termination markets. The NRA notified a new market analysis for mobile call termination networks where it proposed to lower the level of termination rates significantly on the basis of the costs of the most efficient operator in the market, which was the 3G spectrum only operator. On the other hand, as a result of a dispute settlement brought before it, the NRA decided to increase the fixed termination rates of the incumbent operator on account of the cost methodology employed, which questioned the results of long term economic efficiency. The NRA has declared that a pure Long Run Incremental Cost (LRIC) model is under development which should apply to the next round of market reviews. This will bring more legal certainty and incentives towards economic efficiency to the market as well as contribute to consistency in regulation across the EU in line with the Commission Recommendation on the regulatory treatment of fixed and mobile termination rates in the EU.

Amendments to the Telecommunications Act were adopted on 17 June 2009 with the aim of fostering the deployment of NGA networks. In particular, these amendments provide for the possibility to access existing infrastructure (not limited to electronic communications infrastructure) to facilitate network deployment by electronic communications operators. Stakeholders saw these amendments as a favourable step, and expected that it would lead also in practice to positive results facilitating investment. In addition, the new law also modifies some provisions in relation to the obligations to be imposed on significant market power (SMP) operators, specifying that when imposing a cost orientation obligation, the NRA shall take into account the investments made and the risks involved, as well as the future market developments.

Organisation of the NRA

The Austrian Regulatory Authority for Broadcasting and Telecommunications (Rundfunk und Telekom Regulierungs-GmbH - RTR) acts as the operational arm of the Austrian Communications Authority (Kommunikationsbehörde Austria - KommAustria), which is a subordinate administrative body of the Federal Chancellery that regulates the broadcasting sector. RTR also acts as the operational arm of the Telecommunications Control Commission (Telekom-Control-Kommission - TKK), which is responsible for regulation of the telecommunications markets.

As indicated in the previous report, there is legislation in the process of adoption that is expected to modify the legal framework of KommAustria; this legislation was under public consultation at the end of 2009 and is expected to be adopted soon. It has been indicated that the new law will establish a fully fledged independent regulator in the broadcasting sector. The Commission services will follow that matter.

Decision-making

During 2009, the NRA has continued with the third round of market reviews and has recently consulted with the interested parties on several draft proposals. In accordance with the broad interpretation of affected party given by the European Court of Justice[99], the NRA has involved all the appropriate stakeholders in the market review process. The draft measures currently under preparation will already include the details of the remedies to be imposed in each relevant market, as appropriate. This practice represents an improvement with regard to the previous rounds of market analysis, where the details of the remedies were often only imposed at a later stage as a consequence of dispute settlement procedures between operators. It will facilitate the full effectiveness of ex ante regulation in a timelier manner and provide more legal certainty to the market. However, the NRA continues to conduct the market definition and the market analysis as separate processes. The time taken for the completion of the overall decision making process, that is, from the start of market definition until a decision on the market analysis and the imposition of remedies is reached, continues to be long and further efforts from the NRA to improve the duration of this process would be beneficial for the market.

During the reported period, the NRA continued the discussions and regulatory dialogue with stakeholders on current issues such as the appropriate regulatory approach towards NGAs. Alternative operators welcomed this approach but indicated that more transparency and legal certainty in relation to issues that affect operators' strategy and investment decisions are necessary, in particular as regards the future use of the digital dividend in Austria.

The amendments to the Telecommunications Act adopted in June 2009 established that once a market is no longer included in the Austrian market definition ordinance (the Telecommunications Market Ordinance) all existing obligations in that market should be automatically withdrawn. Alternative operators were concerned that their right of appeal would be affected and that this provision would not enable them to contest the NRA's decision to withdraw regulation from a market, since currently they do not appear to have legal standing to challenge the Telecommunications Market Ordinance. However, the NRA confirmed that in these cases, operators would be in a position to appeal the NRA's decision and reasoning not to include one market in the Ordinance. The Commission services will follow this matter.

Alternative operators are concerned about the fact that the deadline for completing the dispute settlement procedures is not always respected and would welcome more efforts from the NRA to adopt important decisions, such as in relation to market analysis or dispute settlements, in a timely manner.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Austrian electronic communications sector was €5.54 billion[100] as of 31 December 2008, representing 2.0% of the gross domestic product. The total value of tangible investment in electronic communications networks for 2008 was €711 million, a reduction of 19.1% with regard to the previous year.

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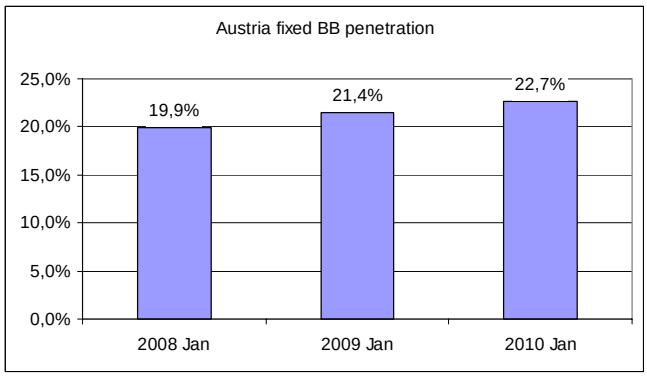
[99] See case C-426/05.

[100] Revenues from international roaming not included.

Broadband

Market situation



The penetration rate was 22.7% in January 2010 (up from 21.8% in July 2009 and 21.4% in January 2009), but still below the EU average of 24.8%. In January 2010, all fixed broadband lines based on means other than DSL, which includes wireless local loop, cable modem, fibre to the home, leased lines, power line communications and others, had a market share of 31.9%.

As regards fixed broadband lines, the market share of the incumbent operator has been increasing over the past years, and it was 51.1% in January 2010 up from 45.4% in January 2009 and above the EU average in January 2010 of 45.0%. In January 2010, 68.1% of broadband lines in Austria were based on DSL technology and the market share of the incumbent fixed network operator in DSL lines was 75.0%, well above the EU average of 55.8%. In January 2010 82.8% of DSL broadband lines provided by new entrants were based on full LLU.

The decline in the rate of growth of fixed broadband services in Austria continues and between January 2009 and January 2010 only 107 733 new lines were created, compared to the 130 533 new lines created between January 2008 and January 2009. For broadband fixed retail lines using technologies other than DSL, there has even been a negative growth between January 2009 and January 2010 of – 36 810 lines. This declining growth in fixed broadband lines may be explained by the popularity of mobile broadband services in Austria.

In this respect, mobile broadband has continued its growing trend during 2009 and mobile broadband penetration in Austria was among the highest in the EU in January 2010 at 15.1%, up from 11.4% in January 2009 and well above the EU average of 5.2%, taking into account only the number of mobile broadband connections using only dedicated data cards/modems/keys[101], typically allowing mobile Internet via laptops.

According to the NRA, residential customers consider mobile broadband services as a substitute for fixed services and do not perceive significant differences in the functionalities of these two types of broadband services. Mobile operators have continued to offer attractive mobile broadband packages at the retail level, even with the possibility for customers to get a subsidized notebook with their contract, either for free or at a reduced price. The NRA has reported that mobile broadband connections account for 35% of the total retail broadband connections.

The incumbent operator continued to offer promotional bundled offers (Kombipaket) during 2009, and it also started to offer triple-play products to business customers combining fixed,

[101] Figures are estimates based on Q3 2009. Mobile broadband dedicated data services via cards/ modems/ keys are defined as the number of contracts with included dedicated data volume of 250 MB or more per month as well as dedicated pre-paid data services (UMTS/HSDPA) including at least 750 MB downloaded per quarter.

mobile and broadband services. These bundles remain a matter of concern for alternative fixed operators, which consider that the margins allowed are not sufficient to enable them to compete in the longer term. The incumbent operator has also started during 2009 to commercialise, together with its mobile branch, a fixed and mobile broadband bundled product which enables customers to use the fixed broadband connection while at home and the mobile connection elsewhere. The main cable operator has entered into an agreement with a mobile operator to offer similar packages at the retail level.

The incumbent operator announced its plans to invest in the NGA network; it has divided the country into different areas depending on the population density and is intending to upgrade its network with FTTH, fibre to the curb (FTTC) or VDSL2 depending on the area. The main cable operator has also started to upgrade its network to offer very high speeds in the main cities.

Regulatory issues

The Austrian Administrative Court annulled on 17 December 2008 the NRA's decision in the wholesale broadband access market where it defined a national market but recognised certain geographic variations in the competitive conditions when defining the remedies. Following that Judgement, on 5 September 2009 RTR notified to the Commission a new definition of the wholesale broadband access market to be included in the Telecommunications Market Ordinance. RTR identified two separate markets for broadband access at the retail level, for residential and business customers, respectively. Whereas the business market included only DSL based connections, the residential market comprised DSL as well as cable TV and mobile broadband connections. On the basis of the situation at the retail level, RTR defined a wholesale broadband access market for the subsequent use of business users and further argued that due to the degree of competition existing at the retail level, it is not necessary to define the market for wholesale broadband access for the subsequent use of residential customers as relevant for ex ante regulation.

On 5 October 2009 the Commission adopted a "serious doubts" letter opening the second phase investigation under Article 7 on this draft measure. The Commission had serious doubts as to the inclusion of mobile broadband in the retail broadband market for residential customers and as to the treatment of external and self supply of bitstream connections for the subsequent use of residential customers in the wholesale broadband access market. On 7 December 2009, after further investigation and amendments made by RTR to the draft measure, the Commission withdrew the serious doubts. The Commission thus accepted RTR's conclusion that on the basis of the current market situation mobile broadband connections are substitutes of fixed broadband connections for residential users in Austria but it invited RTR to closely monitor the market developments, in particular with regard to constraints of further mobile take-up in comparison to the evolution of fixed broadband networks and the impact of NGA deployment.

Alternative operators expressed their concerns as to the situation of fixed broadband services in Austria and were strongly opposing the NRA's decision to withdraw regulation from the wholesale broadband access market for the subsequent use of residential customers. Alternative operators claimed that the wholesale products available do not enable them sufficient margins to compete with the incumbent operator's bundle offers in the long term and are thus urging the NRA to set appropriate regulatory conditions in relation to fixed services and in particular as regards NGA deployment to establish sustainable competitive conditions.

During 2009, the monthly rental prices for full local loop unbundling (LLU) were further reduced to the price which was previously applicable during the Kombipaket promotion period, €6.35, which is below the EU average of €8.55. The monthly rental price for shared access is €3.18 which is however above the EU average of €2.24. During the promotion periods, the one-off connection fee for shared and full LLU is not applicable. As regards the bundle offers of the incumbent, the NRA stated that it regularly verifies that the conditions applied by the incumbent do not lead to a margin squeeze situation. Alternative operators regret that these conditions allow only the incumbent operator to drive competition and that they cannot innovate with similar promotional offers.

RTR had initiated a national discussion on next-generation networks and established an industry group to discuss technical and regulatory issues related to NGA networks; these discussions have continued over 2009. The investment plans of the incumbent operator are now made public, the challenge is to create a regulatory environment which fosters investment and innovation and promotes competition in the fixed broadband market. Alternative operators claim that, due to interferences, the incumbent FTTH and FTTB planned deployments in densely populated areas will prevent them from using their existing LLU infrastructure to provide services on the basis of VDSL. The NRA intends to develop a regulatory model based on coordination meetings between the operators with the aim to facilitate investments and create a level playing field for network deployment. The coordination meetings would give operators an opportunity to declare their commitments and plans to invest in an area. In case several operators are planning to invest in a given area and it is not possible to deploy both networks, the option which would give higher bandwidth to the consumers should prevail, with the possibility to establish compensation payments.

In relation to the possible remedies to be imposed in the market for physical infrastructure access, the NRA envisages the access to the incumbent's ducts and, in addition, a wholesale product for NGA access (called 'virtual unbundling'). The NRA believes that this product should offer the same technical and economical possibilities as well as independence to alternative operators than LLU. Alternative operators consider that this product is essential for preserving competition in the broadband market. It is important that the regulatory approach towards NGA networks is adopted in a proactive manner and solves appropriately the current problems observed in the fixed market in Austria.

Mobile

Market situation

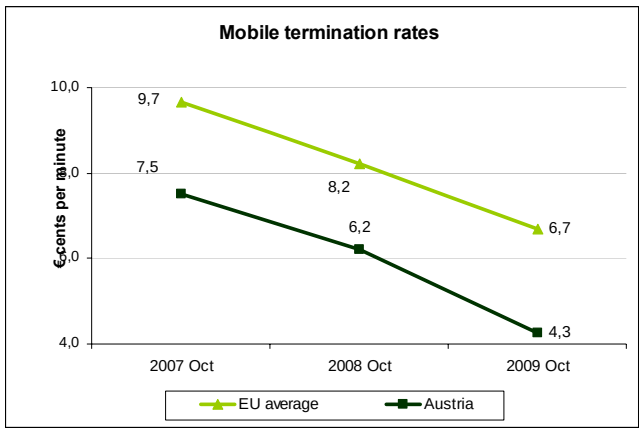
Mobile penetration stood at 133.5% in October 2009 with more than 11 million subscribers, above the EU average of 121.9% and an increasing proportion of the total voice traffic volumes handled through mobile networks (71% at the end of 2008). The mobile market in Austria continues to be highly competitive, with attractive retail prices and innovative services, and with high popularity of mobile broadband services as well. There continues to be important innovation and mobile operators in Austria have stated their commitment to start investing in Long Term Evolution (LTE) during the next year, if legal certainty is provided as regards frequency usage. As the NRA has also stated, the low level of the regulated mobile termination rates has promoted innovation in the offers, facilitating the development of flat-rate offers and delivering lower prices for consumers.

As of June 2009, the leading mobile operator had a market share of 42.9%, the second largest operator had a market share of 31.5% and the rest of the operators together had a market share

of 28%[102]. Almost 70% of the users have a post-paid service, with 30% using prepaid services.

The average price per minute of mobile communications in 2008 was €0.10[103], which is below the EU average of €0.13. The average annual revenue per user has decreased slightly and at the end of 2008 it was €333 compared to €350 the previous year, but it is above the EU average of €323. This suggests that with more competition lower prices for consumers are leading to increased use of these services.

Regulatory issues



The previous market decision concerning voice call termination on individual mobile networks had set the mobile termination rates with a glide path towards a symmetric target rate of 5.72 €-cents to be reached by all operators from 1 January 2009 through linear decreases. Following the annulment by the Administrative Court (VwGH) of this decision in June 2008, the NRA notified a new market definition for mobile call termination at the end of 2008. During 2009, TKK also adopted a decision on a dispute settlement concerning the retroactive setting of the mobile termination rates. In that decision, taking into account newly available data for 2007 and 2008, the NRA resolved to achieve the symmetric target rate of 5.72 €-cents six months in advance of the previously targeted date, i.e. as from 1 July 2008, followed by 4.50 €-cents per minute as from 1 January 2009. Some alternative operators have expressed their concerns about this decision, which could only have an impact on the retroactive payments between operators but could not benefit the consumers.

In addition, TKK notified the third round analysis of the market for voice call termination on mobile networks where it proposed a symmetric glide path for the reduction of mobile termination rates reaching the target charge of 2.01 €-cents as from January 2011. In the final decision, the target charge was to be reached five months later, from June 2011. This substantial reduction is established drawing upon the costs identified for the lowest-cost operator as a benchmark for the efficient operator which, for the first time, was not the incumbent mobile branch but the 3G spectrum only operator. The significant reduction in this operator's costs is driven by the substantial growth of data traffic carried over its network. The Commission welcomed the important reductions in mobile termination rates in Austria, but highlighted the importance of LRIC models using the current or forward-looking costs of an efficient operator. In that respect, the NRA has already indicated that a pure LRIC model is under preparation and that it envisages its application by the time of the next market review. Alternative operators also welcomed the adoption of this decision which, after different appeals and disputes, brings legal certainty to the sector as to the level of mobile termination rates.

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102 Source: Informa Telecoms and Media (2Q 2009).

103 Including a fixed fee for minute packages.

Roaming Regulation

The price caps established in the Roaming Regulation and in the amendments to the Regulation that entered into force in July 2009 were applied in time and operators offered the Eurotariff, which in all but one case was set at almost at the level of the price cap. However, the NRA adopted a decision against a mobile operator which introduced a set up fee instead of the initial minimum charging interval of 30 seconds and, in addition to this set up fee, a per-second billing from the first second on. The NRA indicated that it was not possible to introduce such a set up fee in combination with per-second billing from the first second of the regulated call, and ordered the operator to stop this charging method immediately and to adjust the wrong charging method for the affected customers since 1 July 2009. One mobile operator started offering roaming tariffs alternative to the Eurotariff such as the elimination of roaming charges when travelling in another country where that operator is also present, and operators are also offering roaming bundle offers combining voice, SMS and data roaming, in particular during the summer period.

The amendments to the Telecommunications Act adopted in June 2009 also established the penalties to be imposed in case of non-compliance with the Roaming Regulation, as required by Article 9 of this Regulation.

Fixed

Market situation

The decreasing tendency of the fixed market has continued over the reported period and fixed to mobile substitution remains strong in Austria. In 2008 it was estimated that 29% of the total minutes of communication went over fixed networks and 71% went over mobile networks.

As of July 2009, 83.0% of the subscribers were using the incumbent operator for direct access[104], a percentage which has remained at the same level of the past year and which is above the EU average of 75.9%. However, the market share of the incumbent in calls markets has remained stable or decreased slightly in some segments during 2009; for instance the market share of the incumbent for all fixed calls was 59.6% in December 2008 at almost the same level of 60.8% of December 2007 based on revenues, which was below the EU average of 63.3%. Based on outgoing minutes, the market share for all fixed calls went down from 58.8% to 55.1%, and was also below the EU average of 60.5%. The market share of the incumbent operator for international calls has also gone down from 40.7% to 35.7% in terms of outgoing minutes and from 57.9% to 52.1% in terms of revenues, which remains however slightly higher than the EU average of 50.6%.

Regulatory issues

Whilst the NRA withdrew existing regulation in the retail calls markets for residential customers, it defined as susceptible to ex ante regulation the market for national and international publicly available telephone services for non-residential customers, noting that market entry barriers are high and the incumbent operator was regaining its market share. These markets are no longer listed in the current Recommendation on Relevant Markets and, after carrying out the three criteria test, RTR concluded that these markets were relevant for ex-ante regulation. The Commission urged RTR to re-examine in the SMP analysis the

[104] Data are estimates.

market entry barriers it identified and invited it to work on improving the efficiency of the current wholesale remedies in the context of the market analysis of the relevant wholesale markets. The NRA is expected to notify at Community level the SMP analysis and the proposed remedies on this market shortly.

In relation to fixed termination rates, TKK adopted a decision in a dispute settlement procedure between the incumbent fixed network operator and an alternative operator concerning the setting of fixed interconnection rates. Following a calculation of the relevant costs on the basis of a hybrid forward-looking Long Run Average Incremental Cost (FL-LRAIC) model, TKK finally set the incumbent's regulated costs at the level of those requested by the incumbent in the dispute, since these were lower than the ones yielded from the hybrid model. However, these rates were higher than the ones previously applied by the incumbent. The NRA justified this conclusion, among others, on the declining volumes of traffic in the fixed network. The Commission expressed its concerns about the use of the hybrid model by TKK and invited it to consider, when setting regulated wholesale charges for fixed termination, only the costs which are directly related to the provision of those wholesale services.

As a result of existing regulation, the current fixed interconnection charges in Austria are among the highest in the EU. In October 2009, the rate for fixed interconnection at local level was 0.82 €-cents, compared to an EU average of 0.52 €-cents, and in the framework of the dispute settlement referred to above they were further increased to 1.12 €-cents. The rates for single and double transit were 1.28 €-cents and 2.25 €-cents, significantly higher than the respective EU averages of 0.79 €-cents for single and EU 1.09 €-cents for double transit. Following the dispute settlement decision, these rates were set at 1.58 €-cents and 2.16 €-cents for single and double transit, respectively.

The analysis of the market for fixed call termination was notified at the beginning of 2010 together with the remedies proposed.

In the telecommunications market definition ordinance adopted in December 2008, the NRA defined two separate relevant markets for wholesale terminating segments of leased lines, depending on the bandwidths, and for the higher bandwidths RTR proposed to take account of geographic variations in the competitive conditions by defining sub-national markets. Following this market definition, RTR notified a draft measure proposing to deregulate the nationwide market for wholesale terminating segments of leased lines with very high bandwidths and the market for wholesale terminating segments of leased lines with high bandwidth covering twelve Austrian cities. The Commission invited RTR to closely monitor the market developments and the evolution of competitive conditions in the different geographic markets identified.

In light of the situation of the fixed market in Austria, where the size of the market continues to decrease with strong fixed to mobile substitution and where alternative operators are finding difficult to compete, the NRA is reflecting on the appropriate regulatory approach to introduce more dynamism in the fixed market competition. In particular, and given that wholesale line rental was never taken up in Austria, it is considering imposing an obligation on the incumbent to provide voice over broadband, and is discussing with stakeholders the possibility to establish a capacity-based interconnection model. The Commission will follow these developments.

Broadcasting

Market situation

As of July 2009 there were 91 000 households with analogue terrestrial TV, representing 2.5% of the households, and 169 000 households with digital terrestrial TV, amounting to 4.7% of the households. At the same time, 48.5% of households (1.73 million households) received TV via satellite and 39.4% of households (1.4 million households) used cable as their TV platform.

The consumer adoption of digital terrestrial TV, launched in October 2006, is progressing and the set top box was subsidised to increase take up. Coverage of digital terrestrial TV is significant, and for both MUX (A and B) it is according to Austrian authorities around 90% population coverage (93% for MUX A and 87% for MUX B).

Mobile TV based on DVB-H was launched in June 2008 and its coverage is above 50% of the population. Currently there seem to be no plans to increase this coverage and the usage of mobile TV does not appear to be significant.

IPTV was introduced by the incumbent telecom operator, but the take-up continues to be limited and in July 2009 it amounted to 69 000 households (representing 1.9% of households).

Regulatory issues

New broadcasting legislation is still under the process of adoption. Public consultation on the draft law took place at the end of 2009. It should include the restructuring of the broadcasting regulatory authority which, according to the governing agreement of the coalition parties, would then become fully independent from the government. The Commission services will follow this matter.

The digitalisation process in Austria was initiated in October 2006 and the switchover is scheduled to be completed during the summer 2011. For local and regional digital TV, 16 licenses were granted in December 2008, however not all of them are operating yet since the obligation established in the license was to start operations within a year. Between September and November 2009 there was a second round of tenders to apply for regional licenses.

KommAustria notified to the Commission the definition of the market for broadcasting transmission services in Austria as being relevant for ex ante regulation. In particular, KommAustria identified the following markets after the application of the three criteria test: (i) the market for the multiplexing of broadcasting signals via the multiplex platforms MUX A and MUX B and the transmission of digital terrestrial TV broadcasting signals to end users; (ii) the market for analogue terrestrial FM radio broadcasting, and (iii) the market for access to broadcasting facilities and digital terrestrial transmission of television signals to end-customers. The Commission invited the NRA to conduct as soon as possible the market analysis and to assess at that moment whether the market definition notified still reflected the market reality, particularly with regard to market developments in terms of infrastructure and services competition, and whether the market still met the three criteria test. The analysis of these markets is expected to be finalised early 2010.

Horizontal regulation

Spectrum management

Amendments to the Frequency Utilization Ordinance were adopted on 21 July 2009 and 12 October 2009, in view of introducing some provisions regarding the digital dividend frequency band and implementing several Commission decisions under the Radio Spectrum Decision of 2008 and 2009, respectively. According to the modifications introduced in July 2009, the Frequency Utilization Ordinance reserves the digital dividend frequency band (790-862 MHz) to broadcasting services until June 2015; no further allocations will however take place except for simulcast and for a maximum period of 18 months. It is also foreseen in the Frequency Utilization Ordinance that the date of June 2015 could be advanced and allocation of these frequencies to mobile operators could take place provided that three conditions are met: (i) there is no further demand for these bands for terrestrial television, (ii) there is an agreement on the use of these frequencies with the neighbouring countries to avoid interferences and (iii) a final decision at Austrian and EU level on the future use of the digital dividend is taken[105].

The Austrian Federal Chancellery and the Federal Ministry for Transport, Innovation and Technology have reported that a comprehensive study on the implementation of the digital dividend (frequency band 790-862 MHz), which is expected to form the basis of the decision on the subject, is currently underway and is planned to be finalised in spring 2010. According to the authorities, secondary services (mainly professional wireless microphones for major events) are present in this band more densely than in other Member States and might need to be phased out to another frequency band. Alternative operators stressed the importance of the digital dividend frequency band for the provision of mobile broadband services, in particular in rural areas, and would like the political environment to achieve a rapid and appropriate solution for the digital dividend that would facilitate the objective of bridging the digital divide in rural areas. The Austrian authorities reported that broadcasting operators also claim the need to consider the frequency demand for new developments in the terrestrial broadcasting sector. It is necessary to establish a transparent and structured process in respect of the digital dividend and possible refarming of frequencies in order to give operators the necessary legal certainty and enable them to plan their investments.

With regard to the 900 MHz GSM Directive, it is already indicated in the Frequency Plan that this band will be opened up for other services than GSM if they are technically compatible. The frequencies are assigned until 2015 and currently there are discussions between the Ministry and the NRA on the most appropriate approach on this issue that would ensure that competition can be preserved. The Commission services will follow these issues.

In April 2009 the NRA launched a tender for 3.5GHz frequency licenses. The licenses were divided in one frequency package for eight separate regions and were assigned to 4 operators, who are under the obligation to start providing services by the end of 2009.

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105 On 28 October 2009, the Commission adopted a Communication on 'Transforming the digital dividend into social benefits and economic growth' (COM (2009)586/2) and a Recommendation on 'Facilitating the release of the digital dividend in the European Union' (2009/848/EC).

Implementation of spectrum decisions

As already indicated, amendments to the Frequency Utilization Ordinance were adopted in 2009 in order to implement several Commission decisions under the Radio Spectrum Decision of 2008 and 2009. As regards the implementation of the Commission Decisions adopted pursuant to the Radio Spectrum Decision, the Commission services are currently following the correct implementation of Commission Decisions 2005/513/EC, 2008/411/EC and 2008/477/EC in Austria.

Rights of way and facility sharing

The amendments of the Telecommunications Act adopted in June 2009 have the aim of facilitating access by electronic communications operators to existing infrastructures, not limited to electronic communications infrastructure, to promote NGA deployment. In this respect, owners of rights of way, of use of, and access to these infrastructures have to provide access to electronic communications operators, as long as it is financially viable and technically possible. Operators can thus request access to ducts or cables and, in the event that an agreement between the parties is not reached within four weeks, the NRA should solve the dispute setting, if necessary, the appropriate financial compensation. The law specifies the elements that could be factored for establishing this compensation, such as costs of the facility, including acquisition, operating costs and other costs associated with the shared use as well as charges prevailing on the market.

On the basis of these provisions, the NRA adopted a decision in November 2009 ordering the Austrian railways operator to offer access to a certain cable duct to an alternative ISP. The decision also establishes the fee that the alternative ISP will pay for accessing this particular cable duct of the railways operator, which is 0.64€ per meter per month. Another dispute concerning access to the incumbent's ducts was introduced by the same alternative operator and has however been pending before the NRA for more than one year.

THE CONSUMER INTEREST

Universal service

As in previous years, the financing of the universal service was not based on the funding mechanism laid down in the Telecommunications Act, and operators have continued to agree among themselves on compensation for the universal service provider. There are no discussions at the moment to modify the scope of universal service, but alternative operators consider that with the high mobile penetration and usage in Austria, the need to keep the public payphones is becoming less evident and advocate for the suppression of the provision of public payphones from the scope of the universal service.

Number portability

Number portability continues to be only moderately used in Austria and in absolute figures there has only been a slight increase in both fixed and mobile number portability. Regarding the prices for fixed number portability, Austria remains one of the countries in Europe with a high wholesale price of €21.79[106]. The wholesale price for mobile number portability is not

[106] Maximum price (one-off fee).

currently regulated by the NRA but has remained stable at an average of €8.21. The price to be paid at the retail level by users requesting mobile number portability is at the level of €19, which has been as considered a maximum by the NRA.

Last year certain alternative mobile operators had voiced concerns regarding the message that users get when calling a customer whose number has been ported, informing them of the fact that the number has been ported to another network, since this may discourage consumers, especially business customers, from making use of this facility. During 2009, the NRA resolved a dispute settlement procedure between two mobile operators and confirmed the necessity of keeping the automatic voice message informing the caller of the actual destination network of the call. All operators except the mobile branch of the incumbent operator are in favour of eliminating this message or at least replacing it for a simpler solution. In the dispute settlement, an alternative operator proposed to shorten the voice message but the NRA's decision was to allow any sort of voice message, so that mobile operators can choose to provide either a short or a long version of the message.

While the need to inform the consumer of the ported number is established in the law, with the generalisation of flat-rates at the retail level the necessity of having this message, especially in a long version, appears less evident. Number portability is an essential tool to facilitate competition between different providers, and it is for the NRA to ensure that the pricing and conditions guarantee consumer protection but at the same time not act as a disincentive for consumers to port their numbers. The Commission services will monitor this issue.

Consumer complaints

The NRA has reported a decrease in the number of consumer complaints for 2009, in comparison with 2008[107]. These complaints related mainly with payment disputes and contract issues. The consumer protection department of the Austrian Chamber of Labour expressed concerns as to the lack of tariff transparency for consumers, since tariff plans change very often and there is an increasing number of retail tariffs and packages, as well as the high switching costs for consumers to change to a different provider. The Austrian Chamber of Labour was also concerned about the high charges for data roaming services and the sometimes abusive contract conditions for consumers, such as warranty requirements, debt consequences or contract termination fees.

European emergency number 112

The European emergency number 112 can be called from both fixed and mobile telephones. Caller location information is provided for all calls, upon request (‘pull-system’). There are different national emergency numbers in Austria and there is currently no significant awareness among the population on the European emergency number 112. It would be appropriate that the Member State authorities undertake activities to promote 112 at the national level in order to increase awareness. The Commission services will follow these developments.

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[107] See also RTR's Annual Report on the conciliation procedure: "Tätigkeitsbericht der Schlichtungsstelle 2008", where it was reported that in 2008, the RTR conciliation board recorded, with 5.226 proceedings, around a 50% increase in complaints as compared with 2007. The amount of complaints of 2008 was considered an all time high.

E-privacy

The EU Directive on data retention has still not been transposed in Austria. Regarding data on Internet use and emails, Austria had to transpose the relevant rules laid down in the EU Directive on data retention by March 2009. Drafting of the legislative text was requested to the Ludwig Boltzmann Institute of Human Rights which presented a draft in September 2009. All stakeholders are being consulted in the process of implementation of this directive and discussions are taking place between the relevant Ministries. Alternative operators considered that the draft presented in September appears to be quite balanced and the political aim is to finalise the law early in 2010.

Following the ordinance from the European Court of Justice in February 2009 at a request of a preliminary ruling[108], Austria's High Court decided that ISPs cannot be forced to give personal details of their subscribers to rights holders with a view to enforcing copyrights without a Court order.

[108] See case C-557/07

BELGIUM

INTRODUCTION

No major market development has taken place in Belgium in 2009. The growth of broadband has continued to slow down in Belgium, even though broadband penetration is still above the European average. Broadband speeds are increasing while prices have not significantly decreased. In a relatively stable mobile market, where 3G services have not yet taken off, progress is expected from the auction in 2010 of the fourth UMTS licence. Multiple-play packages are increasingly appreciated by consumers, while prices remain relatively high.

On the regulatory side, the NRA's powers have been reinforced but much work remains to be done by the newly appointed Board. The NRA was not able to conclude its preparatory work for several long awaited important market decisions, among which the broadband and mobile termination markets. While the second round of market analyses still is in its early stages, the NRA is also confronted with the annulment of old market decisions by the national Court. Some pressing competition issues of the past have been decisively settled by the competition authority.

REGULATORY ENVIRONMENT

Main regulatory developments

New bills amending the 2005 Electronic Communications Act and the 2003 NRA Statute and Judicial Recourse and Dispute Settlement Acts, were adopted by the Belgian legislature in May 2009. These amendments are intended to strengthen the regulatory authority, the Institut belge des services postaux et des telecommunications/Belgisch Instituut voor postdiensten en telecommunicatie (IBPT/BIPT), by improving the sanction mechanism, streamlining judicial procedures and consolidating the powers of the regulatory authority. In order to avoid SMP obligations being invalidated for certain periods of time, the NRA is now allowed under certain conditions to adopt decisions with retroactivity.

The second round of market analyses has been delayed, including the adoption of new decisions for the fixed telephony retail market, the wholesale transit market, the wholesale markets for physical network infrastructure access (LLU) and broadband access, and the mobile termination market. Preparatory work including consultations of market parties and the competition authority was ongoing but has not yet been followed by any notification to the Commission.

In the meantime, several appeals against market analyses of the first round were settled by the Court of Appeal in 2009, which led to the complete or partial annulment of decisions. Considering for reasons of legal certainty that this type of work took priority over the normal market reviews, the NRA immediately undertook to re-examine its findings on the basis of its new powers to adopt decisions with retroactivity. A first such decision was adopted in September 2009 for the wholesale markets for (physical) network infrastructure access (LLU) and broadband access.

The Commission's action against Belgium with regard to the universal service obligations is still pending before the European Court of Justice. In September 2009, Belgium was furthermore referred to the Court for not fulfilling its obligations under Article 31 of the

Universal Service Directive with regard to the must-carry obligations in the bilingual region of Brussels Capital.

Organisation of the NRA

After a selection procedure in which a jury of experts participated, four new members were appointed to the Board in November 2009 by royal decree. The governmental decision had been taken on the basis of the experts' final report and the proposal of the minister of Enterprise and Simplification.

Amendments to the 2003 Acts regarding the IBPT/BIPT statute entered into force in June 2009. These amendments encompass improvements to the administrative procedure for enforcement of decisions, and strengthen the NRA's powers. IBPT/BIPT is now allowed to proceed faster when imposing fines, i.e. without issuing (preliminary) formal notices, while being able to impose higher sanctions on operators: the upper limit of 12.5 million EUR has been lifted but the limit of 5% of turnover is maintained. On the other hand, the NRA is entitled, in case of annulment of a decision by a Court judgment, to retroactively restore it, in order to safeguard the objectives of the Electronic Communications Act. The power to specify models and methodologies for accounting separation obligations has also been transferred to IBPT/BIPT, which started a consultation procedure on a proposed decision.

Decision-making

While the selection procedure for the new NRA board was pending, the old board pursued its regulatory work beyond its normal term of office. The announced review of some old market decisions (retail fixed telephony markets, wholesale transit services in the fixed telephony market) as well as the new round of market analyses based on the 2007 Recommendation had yet to produce any concrete results. A few consultations on market decisions were launched during the last months of 2009.

Ensuring effective regulation within reasonable timeframes remains indeed a challenge for IBPT/BIPT. Most NRA decisions are systematically appealed through long-lasting proceedings and the Court's rulings are often based on procedural grounds. Between May and October 2009, the Court of Appeal annulled three market decisions, respectively on the wholesale markets for physical network infrastructure access (LLU) and broadband access (decision dating from January 2008), the wholesale market for voice call termination on individual mobile networks (from August 2005) and the retail and wholesale leased lines markets (from January 2007).

The outcome of the appeals has seemingly put a strain on IBPT/BIPT's normal activities, as the NRA had to replace the annulled decisions. The revised draft for the wholesale markets for physical network infrastructure access (LLU) and broadband access was again put to public consultation. The motivation to impose sub-loop unbundling and broadband access as a necessary complement to local loop unbundling was strengthened, while calculations and justifications of the competitive situation in the market were improved. After notification to the Commission, the restored decision was adopted in September 2009. As to the annulled decision for the wholesale mobile termination market, the NRA would have to re-examine the market for the period 2005-2008 in order to adopt a retroactive decision, together with the relevant market analysis for the upcoming regulatory period.

In May 2009, the competition authority imposed the largest fine ever in the history of Belgian competition law, amounting to € 66.3 million, on the mobile branch of the fixed incumbent. The mobile operator was found to have abused its dominant position on the market for mobile telephone services in 2004 and 2005 by a strategy of margin squeeze between its corporate on-net retail tariffs and the mobile termination tariffs charged to competing operators, excluding rivals from the business market in particular. Other competition cases lodged against the incumbent (e.g. on abuse of dominance by the introduction of flat-fee tariff plans in 2005) are expected to be resolved in 2010.

MARKET AND REGULATORY DEVELOPMENTS

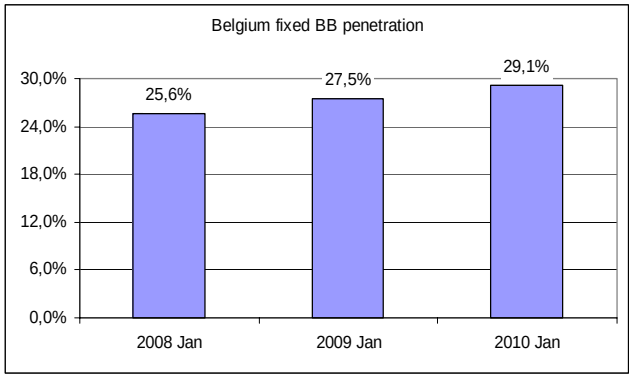
The total turnover of the Belgian telecommunications sector stagnated more or less at the level of €9.66 billion on 31 December 2008, whereas the revenues from fixed markets slightly grew to €5.63 billion, and the revenues from mobile markets fell to € 4.03 billion. The total value of investments in telecom networks grew by 4.5% to €1.28 billion. The incumbent invested €0.42 billion in its fixed infrastructure in 2008, whereas the alternative operators invested €0.46 billion, both investment levels growing by more than 6%. Mobile operators' investments remained stable at €0.4 billion.

While the incumbent is further rolling out its fibre-to-the-curb network (with a declared coverage of more than 70% of households), fibre-to-the-home remains marginal, apart from a few trials. Reflection with regard to the roll-out of NGN-NGA networks has continued throughout 2009. A study regarding strategic options to promote the development of broadband was submitted to consultation at the request of the Minister of Enterprise and Simplification. In a consultation note, the NRA itself expressed its views concerning the actions that might contribute to stimulate Fibre-to-the-Home. When the Ministry finally launched its Digital Action Plan 2010-2015 in 30 points, the attention turned in particular to the necessity of well-performing networks. Some actions like the reinforcement of regulators, and the granting of new licences for mobile services, are already under way while other legislative or administrative interventions, regarding for example the rights of way for fibre roll-out, the equipment of buildings or the use of the digital dividend, would still need to be undertaken.

While prices have remained stable over the last years, competition between the fixed incumbent and the cable operators has led to bundling of products and to improved quality and speed of Internet access.

Broadband

Market situation



With a ninth place in the European ranking of broadband penetration, Belgium is still above the European average of 24.8%. Growth was again below average (1.6 percent points between January 2009 and January 2010, compared with the EU average of almost 2 percentage points). Belgium is further falling back from fifth place in 2006, to sixth place in 2007 and eight place in

2008.

As of January 2010, almost 49% of the Belgian retail broadband lines are provided by the fixed incumbent. Its market share has considerably increased, compared to 46% in January 2009. When resale lines are taken into consideration, its market share exceeds 51%. Non-DSL lines, among which mainly cable broadband lines, account for 43% of the market (January 2010), an increase in comparison with January 2009 (41.8%). The market share of new entrants relying on DSL technology has strongly decreased (14.3% in January 2010 compared to 21.5% one year before). The number of users of dedicated data services (via modems/cards/keys only) still remains very limited in Belgium (1.7% of population).

Bitstream access remains the main form of access to the incumbent's network (40% of alternative operators' DSL access lines). Unbundled access remains modest (24% of alternative operators' DSL access lines), in spite of low prices for shared access.

While the speed of fixed broadband connections is quite high (41% of all retail lines offer 10 Mbps and more, and 52% offer speeds between 2 and 10 Mbps), prices have constantly remained at a fairly high level during the last years. These findings have been shown notably by means of the price barometer, a new tool developed by the regulator to keep an eye on price developments in several markets, and especially the broadband access market.

An important national consumer association is extremely concerned about the invariably high priced services since many years, and the failing service levels, as regards inter alia the customer services of the Internet service providers. It calls for strong political and regulatory action against the alleged lack of competition and the expensive Internet connections.

Regulatory issues

The NRA had committed in its January 2008 decisions on the markets for physical network infrastructure access (LLU) and for wholesale broadband (bitstream) access, to perform new market reviews before mid 2009. This has however not occurred.

Both market analyses on unbundling and bitstream access were annulled by the Court of Appeal in May 2009. Decisions were declared void because of insufficient substantiation, respectively with regard to some remedies and the eligibility of the market for ex-ante regulation. IBPT/BIPT replaced the decisions in September 2009, strengthening the motivation to regulate the incumbent's network and improving the calculations and justifications of the competitive situation in the market. New market reviews were announced for 2010.

While the bitstream reference offer for ADSL2+ was already made available in 2008, the reference offer for VDSL2 has not been finalised. For the latter technology, which the incumbent has been commercialising at a large scale since April 2008 (70% of households reached), only in October 2009 a qualitative decision was adopted (regarding the use of modem, profiles, service level agreements, migration rules and other operational aspects). In the meantime, consultations were held on rental fees for access and transport, including transport over Ethernet. The alternative operators point to the essential role of a complete wholesale bitstream offer for VDSL2. They urgently request cost-oriented tariffs, good service quality parameters and service level agreements, without limitations, in a context where migrations to Ethernet and All-IP, with the phasing out of leased lines, would be taking place within the near future.

Closures of local exchanges would furthermore take place as from end 2012 in some areas, where unbundling is intensively used. In this regard, the NRA stresses the obligation of transparency with regard to network developments, as imposed in the market decisions. Following the NRA's request for information, the incumbent published a document presenting its network transformation outlook for the coming years in October 2009 and organised a workshop with the sector in November 2009.

Since many years, alternative operators have expressed strong concerns regarding the quality of the incumbent's wholesale business services. For that reason, the operational processes with regard to provision of access, on a non-discriminatory, transparent and efficient basis, were the subject of an audit in 2009. The recommendations of the NRA based on the audit are expected to be submitted to consultation of the sector by the beginning of 2010.

Mobile

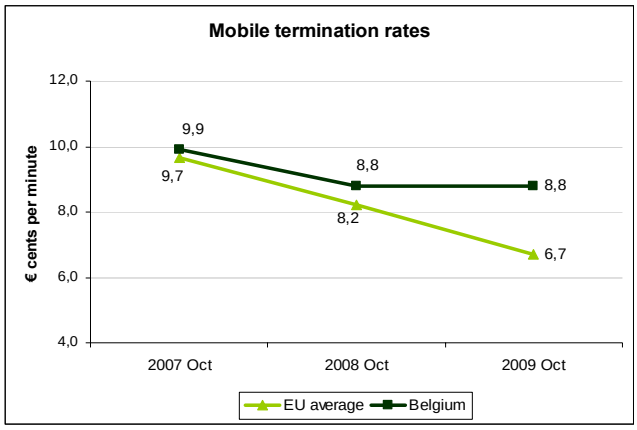
Market situation

The penetration rate in terms of active subscribers stagnated at 102.9% (situation at 1 October 2009), a one percentage point increase compared to 2008 and far below the European average of 121.9%.

The market shares (SIM cards) of the second and the third operator, with regard to the first operator, have not substantially changed: respectively 31.1% and 24.6% (compared with 33.6% and 23.4% in 2008). The market share of mobile virtual network operators (SIM cards) continues growing: 13.5% in 2008 against 8.2% in 2007[109]. The proportion of pre-paid subscribers remains high (59%).

3G services of the first and the second operator covered respectively 90% and 80% of the population by end 2008. The third operator started offering 3G services by the end of 2009.

Regulatory issues



The Belgian termination rates have not changed in comparison with 2008. Currently they are based on the decision that IBPT/BIPT adopted in April 2008 after the Court's decision to suspend the previous decision of December 2007. Following that decision, the applied glide path came to an end in July 2008. Besides their high level (8.80 €-cents) compared to the European average (6.70 €-cents), termination rates are also asymmetric between the first and the second and third operators. In spite of commitments in that regard, the NRA has not undertaken further steps to remedy this situation in 2009.

On 30 June 2009, the Appeal Court annulled IBPT/BIPT's August 2006 market decision. After retroactive restoration of the latter decision for the period 2006-2007, the NRA is

109 Source: IBPT/BIPT.

expected to carry out a new market analysis taking utmost account of the new Commission Recommendation for the regulatory treatment of fixed and mobile call termination rates, which should lead to lower termination charges.

Roaming Regulation

The Belgian operators are complying with the requirements of the Roaming Regulation. One network operator and some virtual operators are offering voice roaming at lower tariffs.

Fixed

Market situation

The number of PSTN lines has again declined by 9.2% while cable and voice over broadband access lines have been growing in importance. In this market, cable telephony achieved a market share of 14.5%[110].

Fixed voice telephony traffic in general has also been declining (by 6.7% in 2008, compared to 2.9% in 2007), and for the first time, mobile traffic volume exceeded that of fixed telephony traffic. With a percentage of 65.0%, the incumbent remains dominant as to overall traffic volumes, also in the international calls market where its market share grew from 54.0% to 59.0%. The incumbent's market share of all calls by revenues has slightly decreased but remains high (68.2% in 2008 compared to 70.6% in 2007). Traffic volume in minutes of voice-over-broadband telephony has been growing but the market share of these operators still remains limited (5.4% in 2008, compared to the EU average of 14.5%)[111].

Regulatory issues

A draft decision on the wholesale fixed call origination market was consulted with the market in October 2009. The fixed incumbent would again be designated as having SMP and would be imposed remedies. As to the wholesale market of transit services in the fixed telephone network, another consultation was held in October 2009.

The November 2008 decision for the fixed retail telephone services market (for both business and residential customers) provided for a validity of one year. Despite the Commission's comments, inviting IBPT/BIPT to undertake a new market analysis at the latest within one year following adoption of the final measures, no further steps have been undertaken in 2009.

The retail and wholesale leased lines market decisions (dating from January 2007) were annulled by the Appeal Court in October 2009. The Court agreed with the NRA that the existing obligation to co-operate with the regional media regulators, as laid down in the Belgian co-operation agreement, was not applicable to services, and thus to leased lines. It found however, referring to Article 3(4) of the Framework Directive, that the general requirement of co-operation between relevant authorities had not been respected.

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110 Source: IBPT/BIPT data of December 2008.

111 However, the data are underestimated as one of the cable operators does not provide a split between VoIP calls and other calls.

Broadcasting

Market situation

9.0% of the Belgian population avail themselves of bundled offers. While take-up of bundles is thus increasing, however only 5.2% buy bundled packs that include broadcasting services. Only the fixed incumbent and the cable companies actually offer triple-play packages.

Cable TV remains the most used platform, offering analogue and digital transmission (82% of households; July 2009). 12.3% of households use the incumbent's IPTV platform. Two mobile network operators have started providing a broadcast offering.

Regulatory issues

Digital switchover in the northern part of the country took place in 2008 and the Flemish government was able to free digital frequencies for the provision of a radio and television broadcasting network. In a selection procedure, in which only one applicant took part, the Flemish Regulator for the Media granted licences to the operator that was already providing transmission services to the public broadcaster (June 2009).

In the southern part of the country, digital switchover will take place in November 2011. The media regulator organised a consultation with the market with regard to the launch of digital broadcasting services and the follow-up to the strategic action plan of 2007.

Horizontal regulation

Spectrum management

In 2008, both IBPT/BIPT and the Minister had decided not to proceed to tacit renewal of the 2G licences and to let them expire in 2010 (with regard to the first and second operator). This would have allowed to temporarily extend the GSM900 and DCS1800 licences and to rearrange them in the future. The Appeal Court however annulled the decisions on different grounds, which led to the tacit renewal of these licences until 2015.

The government reiterated in 2009 its intention to allow a fourth 3G operator in the Belgian market. Following the Court decisions with regard to the renewal of the 2G licences, the government modified the applicable conditions and a new public consultation of the market was launched in December 2009. The fourth mobile licence would be technology-neutral. It is expected to be auctioned in the 2 GHz band for a period of 11 years.

The government decided furthermore that five licences should be auctioned in the 2.6 GHz band shortly after the auction of the fourth 3G licence, which would allow further developments in the use of LTE and WiMAX. Legislation for both procedures would be adopted at the same time.

A royal decree concerning licences in the 3400-3800 MHz bands was published in March 2009. Procedures for the issuing of these licences, through a beauty contest, are under preparation.

Another royal decree specifying the conditions for spectrum trading was adopted in February 2010.

Implementation of spectrum decisions

Belgium has reported that it has implemented all the Commission Decisions harmonising the use of spectrum, except Decisions 2007/344/EC on harmonised availability of information regarding spectrum use, 2008/294/EC on mobile communications onboard aircraft, 2008/671/EC on intelligent transport systems and Decision 2008/477/EC on the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community. For the latter decision, a new royal decree was under preparation at the time of drafting this report. The implementation of three Decisions (2005/513/EC, 2008/411/EC and 2008/477/EC) is under scrutiny.

Rights of way and facility sharing

The Belgian Constitutional Court recognised, in its ruling of January 2009, the competence of the Regions for environmental and health aspects of antennas for mobile telephony. As a consequence the three Regions have been issuing their own norms for electromagnetic fields exposure. The delayed adoption of implementation measures in the Flemish and the Brussels Region has led to a moratorium in the delivery of building permits, which has raised concerns among mobile operators as regards the possibilities of further network development.

Two mobile network operators concluded an agreement to share the acquisition and construction of new sites for masts, public utility cables and security and transmission equipment. The agreement, which could have positive effects on network coverage and compliance with environmental norms, would be open to participation from the third mobile operator.

Administrative charges

The operators continue pointing to the IBPT/BIPT's accounts, which show since many years an allegedly unjustifiable surplus. Although the NRA is obliged to provide a yearly overview of its administrative costs and of the total sum of the charges collected, it appears that surpluses on the accounts are recurrent and systematically transferred to the State treasury. As indicated in the IBPT/BIPT 2008 accounts, an amount of €7.5 million was transferred to the treasury. Operators signal that these and other expenses would not be covered by the administrative costs resulting from the regulatory work. They are furthermore required to contribute to new funds such as the fund for the management of the social tariffs database and the fund for emergency services.

THE CONSUMER INTEREST

Tariff transparency and quality of service

On 3 April 2009, IBPT/BIPT put its long awaited "tariff simulator" for consumers on the web. This tool allows comparing the tariffs for fixed telephony, mobile telephony and also broadband access and use. At a later stage, it would also become possible to compare bundled offers. Following the NRA decision of October 2009, to be implemented within one year, operators are furthermore obliged to make available for the consumer, on request and at a secured page of their website, a certain amount of information regarding the consumer's profile. In a later stage, this profile could be linked to the tariff simulator. According to a new bill proposed in December 2009, the compulsory mention on every invoice to the customer of

the possibility to consult the tariff simulator finally would promote easier switching between Internet service providers.

End-users of premium rate numbers were generally confronted with higher tariffs when the call was made from a mobile network. By royal decree of 24 March 2009, maximum tariffs for certain categories of expensive premium rate numbers have been reduced and aligned with the tariffs for fixed calls.

Universal service

In January 2008, the Commission referred Belgium to the Court of Justice, since it considered that the Belgian legislation regarding the costing and financing of the universal service obligation, in particular the social tariffs, as well as the determination of the unfair burden, infringes the Universal Service Directive. While the case is still pending before the Court, no steps have been undertaken by Belgium to address this issue.

The NRA adopted a further decision, in April 2009, with regard to the methodology for allocation, among the concerned operators, of the costs related to the management and the use of the social tariffs database (and the specific costs relating to 2006 and 2007), set up to ensure the implementation of the social component of the Belgian universal service obligations.

Number portability

Since 1 July 2009, number portability is also available for geographical numbers assigned for nomadic services of voice-over-broadband operators.

In Belgium, it takes only 2 days for porting a fixed or a mobile number. The cumulative number of ported mobile numbers has further increased to 2.8 million numbers as of 30 September 2009.

Consumer complaints

The amount of consumer complaints lodged before the independent Ombudsman has been steadily increasing over the last years (doubling in five years time). It stabilised however for the first time in 2009. A new bill, proposed by the government in December 2009, is expected to reduce the number of complaints by a certain number of measures. Operators would be made more responsible for the first-line service (customer service, help desks, etc.), insofar as they would be obliged to answer calls within a limited timeframe of a few minutes (or, if this is not possible, to contact the customer at his request). By the same bill, switching between Internet access packages within the same provider and switching from one provider to another would me made faster and easier.

A royal decree establishing an Ethical Code for Telecommunications, on which base the Ethical Commission is able to settle certain complaints on certain aspects of premium rate services, is under preparation.

European emergency number 112

Belgium's emergency call centres are migrating to a new technology, which allows a centralised handling of all calls to emergency numbers. Eleven centres would become operational, one for each province and one for the Region of Brussels Capital. Delays or

difficulties in passing 112 calls to the police services should be limited, as these centres would handle all emergency calls to the European as well as to the national emergency numbers.

Harmonised numbers for harmonised services of social value (116)

By royal decree, the number 116000 assigned in 2007 to Child Focus (hotline for reporting missing children) has been granted the status of emergency number, which means that it has to be carried free of charge by operators. The numbers 116111 and 116123 have been reserved in the numbering plan but have not yet been assigned.

Must-carry

Considering that Belgium's 2007 must-carry legislation for the bilingual region of Brussels-Capital does not conform to the Universal Service Directive, the Commission referred the Member State to the Court in September 2009.

ePrivacy

The Data Retention Directive has not yet been transposed into Belgian law. This matter is being discussed in the federal government.

BULGARIA

INTRODUCTION

The mobile market continues to be the most dynamic in the sector although growth is slowing as signs of maturity appear. While the mobile penetration rate is high, consumer prices for calls within the same mobile network (on-net) still remain significantly lower than prices for calls to other networks (off-net) thus forcing consumers to hold more than one mobile subscription. Broadband penetration has increased slightly but remains the lowest in the EU despite strong platform competition. Alternative operators are continuing to face barriers to entering the DSL broadband market using the incumbent's bitstream or unbundled wholesale products. The fixed market is dominated by the incumbent and is consequently still characterised by limited competition. The number of active fixed lines has fallen despite the availability of various bundled offers from the incumbent, mainly due to fixed-to-mobile substitution and the growing usage of voice-over-IP (VoIP). Alternative operators' fixed market shares are still low and appear to be stagnating.

The level of mobile prices has also become an issue of political debate between the Government and mobile operators. In order to tackle the problem of high off-net mobile prices, the national regulatory authority (NRA), the Communications Regulation Commission (CRC, Комисия за регулиране на съобщенията) has adopted a glide path for reducing mobile termination rates (MTR). The analyses of the broadband markets, which have been delayed by the NRA in 2009, are expected to include measures such as access to the incumbent's passive infrastructure. In general, the efficiency of the regulator has improved and significant progress has been made in market analysis and the imposition of remedies. While the NRA has imposed administrative penalties on a number of operators, the enforcement of remedies and their market impact remains an issue in certain cases due to lengthy administrative procedures and related judicial reviews as well as lack of effectiveness of penalties on certain market players for non-compliance.

REGULATORY DEVELOPMENTS

Main regulatory developments

As a consequence of changes in the political landscape following Parliamentary elections in July 2009, the former State Agency for Information Technology and Communications was closed and its responsibilities have been transferred to the Ministry of Transport, Information Technology and Communications (MTITC). A new executive agency for electronic communications networks and information systems has taken over responsibility for electronic communications infrastructure for the purpose of national security and defence.

In November 2009 the new Bulgarian Government adopted a national broadband strategy for the period 2010-2013, which defines broadband as access to voice, data and video at a recommended minimum speed of 1 Mbps. While it lays down a framework for promotional and regulatory measures, a more detailed programme concerning regional broadband availability, the overall scope of broadband projects and private sector co-financing is still pending.

The Law on Electronic Communications (LEC) − which is the primary legislative instrument for transposing Community law in electronic communications − was substantially amended in

the period March-June 2009. In effect, new provisions were included concerning *inter alia* the process of digital switchover, the new board structure of the CRC, the powers of the NRA to impose specific obligations and amendments to reference offers, compensation conditions for provision of the universal service, penalties for illegal cable deployments, and rules for data collection for the purpose of investigating criminal offences. However, after a review in December 2009, the new Bulgarian Government adopted a draft amendment to the LEC which *inter alia* re-establishes the previous board structure of the CRC based on five members with five-year mandates.

A controversial new legal basis for the process of digital switchover was laid down by amendments of the LEC and the Radio and Television Act (RTA), as well as by the new Law on Public Broadcasting (LPB). In particular, the LEC stipulated a separation of stakeholders in the domain of digital terrestrial broadcasting, consisting of the following categories: content providers, broadcast operators (who operate multiplexes), and transmission network operators. According to the LEC, a broadcast operator may not simultaneously be a content provider and an operator of an electronic communications network for the transmission of radio and TV programmes. Furthermore, a broadcast operator may be a holder of rights of use of radio spectrum for digital terrestrial broadcasting. Accordingly, in the period May-June 2009 the CRC conducted two spectrum contests and granted rights of use of radio spectrum to two commercial broadcast operators with a national coverage requirement.

However, as a result of litigation, the Bulgarian Constitutional Court declared certain provisions on digital switchover as outlined above to be unconstitutional, in particular the separation of broadcast and transmission network operators as well as the right of a single broadcast operator to operate multiple national broadcast networks. Appeals against the CRC's decisions arising from the aforementioned spectrum contest procedures have been initiated before the Supreme Administrative Court. These may delay the timetable for transition to digital terrestrial television (DTTV) adopted in 2008. At the time of writing the report, the Court had confirmed in the first instance the CRC's decision on the first contest concerning the authorization for the first phase of transition to DTTV. Also, following a review by the new Government, amendments to the RTA including *inter alia* the abolition of the LPB were pending for adoption by the Bulgarian legislature. The Commission services are following these developments to ensure that Community principles of transparency and non-discrimination are observed.

Due to unavailability of portability services for fixed (geographic) numbers, the Commission launched an infringement procedure against Bulgaria in May 2009. Subsequently, the CRC announced the introduction of fixed number portability as of 1 July 2009.

In 2009, the CRC advanced the process of market analysis and submitted first-round notifications in compliance with the Community consultation mechanism on a number of retail and wholesale markets[112], prior to subsequent adoption of regulatory decisions. In particular, the CRC adopted its decisions on analysis and remedies for the markets for fixed

[112] Markets 3 to 6 of the Commission Recommendation 2003/311/CE of 11 February 2003 on Relevant Product and Service Markets within the electronic communications sector susceptible to ex-ante regulation (the 2003 Recommendation) and markets 1, 2, 3 and 7 of the Commission Recommendation 2007/879/EC of 17.12.2007 on Relevant Product and Service Markets within the electronic communications sector susceptible to ex-ante regulation (the 2007 Recommendation) have been notified to the Commission by the CRC under the Article 7 procedure.

and mobile termination in March 2009. These are effective from 1 April 2009 and introduce significant reductions on existing levels.

The analysis of the wholesale broadband markets has been delayed. One reason for this was the proposed approach to regulatory treatment of the access by alternative operators to ducts and masts in the incumbent's network. Many alternative operators complained that certain local area network (LAN) market players operate in breach of the current legal framework, which bans overhead cable installations. In order to resolve potential problems related to the provision of access to the infrastructure of the incumbent, the CRC launched a public consultation procedure on the need to amend the existing general terms and conditions of the incumbent, which are the basis for the conclusion of agreements for co-location.

Furthermore, important secondary legislation was adopted on the rules for access and interconnection, primary and secondary use of numbers, and number portability.

Organisation of the NRA

The structure and organisation of the CRC board lacks legal certainty. Following the draft amendments to LEC proposed by the new Bulgarian Government in November 2009, the number of board members would be limited to five with a five-year mandate, thus re-establishing the situation before 1 July 2009. According to a previous amendment of the LEC, as of 1 July 2009 the CRC board was enlarged to nine members, all of whom are elected for a mandate of six years. Under this system the Chairman of the CRC is appointed by the Council of Ministers and six of the members are elected by the Parliament, including the Deputy Chairman. The Bulgarian President appoints two of the members. The number of administrative staff of the regulator (about 250 people) has stayed virtually unchanged.

Decision-making

Increased regulatory activity and faster decision-making by the NRA lead to important regulatory decisions e.g. on termination rates and fixed number portability. The procedures for the contests for granting rights of use of spectrum for digital terrestrial broadcasting were completed in good time.

However, in certain cases the enforcement of imposed remedies has been incomplete or delayed. The majority of regulatory decisions in 2009 − such as the analyses of the fixed retail markets or the introduction of a 'beep tone' for ported mobile numbers − have been subject to court appeals. While the current Bulgarian legal system includes a two-stage appeal procedure before the Supreme Administrative Court, the LEC stipulates that major NRA decisions should not be suspended pending an appeal. In some cases, the collection of penalty fees from operators has been delayed due to lengthy court proceedings.

MARKET DEVELOPMENTS

The lack of effective competition in the fixed markets is evident from the size of the incumbent's market share in all fixed retail markets. The incumbent merged its fixed and mobile arm in September 2009. Currently all Bulgarian mobile operators also offer fixed-line services.

The total turnover in the electronic communications sector increased by 5.7% to € 1 813 million at the end of 2008 (compared to € 1 715 million at the end of 2007), mainly due to increased revenues in the mobile and broadband sectors. However, the rate of growth has

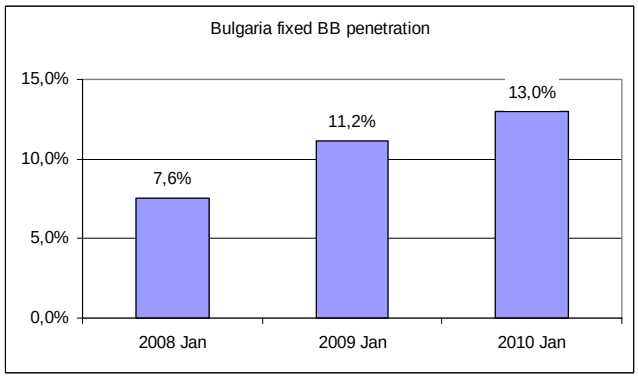
halved compared to the previous year, mainly as a consequence of the economic downturn. While revenues from mobile services increased by 8.8%, the fixed sector has seen its revenues virtually unchanged. Broadband revenues grew by 30%.

The total value of investment continued to decline in 2008 and reached € 405 million (down by 24.8% compared to 2007), which accounted for 1.2 % of the gross domestic product.

Bundled products have not gained a significant market share. The number of double-play offers has increased, whereas the number of triple-play offers showed a downward trend.

Broadband

Market situation



The Bulgarian broadband market remains rather fragmented with more than 550 market players. The broadband penetration rate reached 13% in January 2010 (compared to 11.2% in January 2009) which is far below the EU-27 average (24.8% in January 2010) and still the lowest in the EU. The total number of retail broadband lines increased to 986 434 in January 2010, compared to 853 089 (or up by 15.6%) in January 2009, due to growth both, in the incumbent's DSL customer base and in the number of non-DSL broadband lines.

The broadband market comprises different platforms such as LAN, cable, satellite and DSL. The share of DSL (being exclusively incumbent's lines) increased to 31.4% of all fixed broadband lines in January 2010, compared to 30% in January 2009. The remaining 68.6% of broadband lines belong to alternative operators, dominated by LAN (approximately 54%). The large share of LAN connections has a positive impact on the maximum transmission speeds − 60.6% of the broadband connections operate at download speeds exceeding 10 Mbps and another 35% of the broadband connections have speeds above 2 Mbps. The market share of fibre-based operators in terms of number of subscribers was 1.3% as of January 2010 and that of WiMax operators remained marginal (below 1%). Mobile broadband continued to develop and an increasing number of subscribers were using 3G data services in 2009.

Despite the growth in the number of DSL customers, there is no effective competition in the DSL market since only two alternative operators provide a small number of DSL connections based on bitstream access. The incumbent had 309 554 DSL lines and even increased its share to 99.9% of the DSL broadband market in January 2010 (up from 96.7% in January 2009). It has reduced the prices of its retail DSL products (at maximum speeds of 6 Mbps or 12 Mbps) by more than 20% compared to 2008. Furthermore, the incumbent launched a naked bitstream product in June 2009, which has not been taken up by alternative operators although contracts have been signed. The lack of fully unbundled lines and the scarce availability of shared lines in the country suggest that a rapid completion of the first-round analysis of the broadband markets by the NRA is critical.

In general, the cable sector continued to be fragmented, despite the consolidation of the two biggest cable operators (Евроком and Кейбълтел) − whose combined market share is estimated to exceed 25%. Competitors are concerned about the impact of the merger on the state of competition.

Regulatory issues

Following the conclusion of several bitstream agreements in May 2008, (in the absence of a completed market analysis) alternative operators have complained about margin squeeze and unfavourable conditions of service delivery. A similar situation appears to exist on the market for local-loop unbundling (LLU), where a few agreements exist. In November 2009, the incumbent published a reference implementation offer for wholesale unbundled access for public consultation.

There are concerns regarding the development of a level playing field in the broadband sector. Both, the incumbent and certain alternative operators complain about insufficient or ineffective measures against broadband LAN operators, who allegedly distort competition by not paying taxes or licence fees or by keeping illegal cable installations, which enables them to offer disproportionately low-price products of average quality. The CRC has intensified efforts in this respect and states that it has carried out more than 450 regular inspections in 2009 and has imposed various sanctions at a total value of € 276 000 on operators for breaches of the LEC, mainly for lack of prior notification, overdue payment or because of illegal cable deployment.

In particular, according to some market players, a number of fixed broadband operators have deployed overhead cables in urban areas or illegally accessed the incumbent's ducts. In this regard, the LEC stipulates that cable networks deployed within urban areas with a population exceeding 10 000 inhabitants should be placed under ground. The LEC also includes provision for serious penalties for aerial cable installations. Since large fines, although legal, may endanger the economic position of small alternative operators, which have largely contributed to accelerating broadband penetration, it is essential that underground access to existing infrastructure is possible without administrative or pricing barriers. In this regard, the current terms of the incumbent for granting alternative operators access to its ducts network (as approved by the CRC in 2007 and judicially confirmed in 2009) are allegedly in contrast to previous agreements by specifying higher charges on a per-cable basis.

Effective regulatory measures regarding the access to the incumbent's passive infrastructure are essential. These are expected to be introduced following the analysis of the wholesale broadband markets, in accordance with the EU telecom rules, which should be notified to the Commission in 2010. As an intermediate solution, the CRC has initiated consultations with the incumbent on improving its general terms and conditions, in order to create a better competitive environment.

Mobile

Market situation

While the mobile sector accounts for 62.8% of the total revenues of the electronic communications market, it has begun to show signs of saturation. The mobile penetration rate increased slightly and is still among the highest in the EU − 138.9% in October 2009 (up from 137.4% in October 2008), compared to the EU average of 121.9 %. The proportion of post-

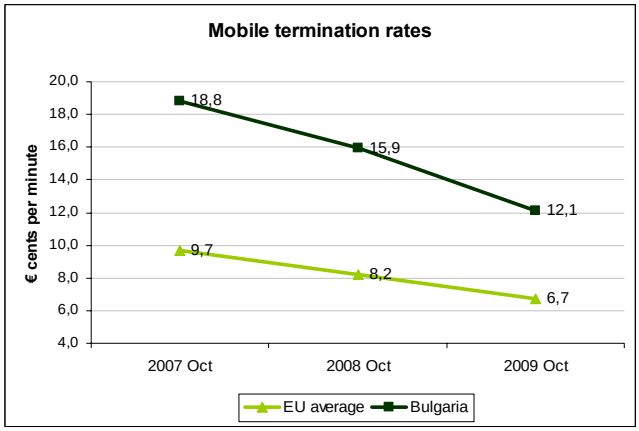
paid mobile users was 55.5%. The average revenue per user remained virtually the same at the level of € 112 in 2008.

The market share of the major mobile operator in terms of number of subscribers has remained almost unchanged since last year at 49.4% in October 2009 while the third operator slightly increased its market share from 12.3% in October 2008 to 13.1% in October 2009. The second operator's market share declined slightly from 38.3% to 37.5% in the same period. As reported previously, there are no mobile virtual network operators (MVNOs) or national roaming between the mobile operators.

All three mobile operators offer 2G and 3G mobile services and the investment in UMTS networks has grown. UMTS population coverage reached 61.4%, 75.7% and 43% for the first, second and third operator, respectively, at the end of 2008. Mobile broadband penetration rate, based on the usage of data cards, modems or keys, was 1% in July 2009 (EU average of 4.2 %).

As a result of high mobile termination rates and for reasons of business strategy, mobile operators' prices for off-net calls are much higher than on-net prices. Therefore, in order to benefit from low mobile rates per minute (on average € 0.05 in 2008) consumers keep more than one mobile subscription in parallel. This development partly explains the slow growth rate of the smallest mobile operator. All mobile operators offer bundles, including fixed and mobile services.

Regulatory issues



The CRC adopted its final decisions on the market analysis and remedies on the mobile termination markets in March 2009. The proposed measures include *inter alia* a glide path for MTR which sets a level of 10.5 €-cents for peak traffic as of January 2010. In addition, symmetry was introduced between the fixed-to-mobile and mobile-to-mobile termination rates. As a result, price reductions at the last stage of the regulatory period will vary between 42% and 56% lower compared to the levels before adopting the measures. As of July 2010 the MTR will drop to 6.56 €-cents per minute for peak traffic and to 5.62 €-cents per minute for off-peak traffic. The CRC reported plans to develop a methodology for a cost-orientated calculation of termination rates according to the Commission Recommendation on regulatory treatment of fixed and mobile termination rates of 2009.

Roaming Regulation

All mobile operators offer the Eurotariff for voice calls and SMS as required by the amended Roaming Regulation of 2009 at levels close to the specified price cap. Incoming calls are billed per second and outgoing calls are billed per second after an initial period of 30 seconds, both for pre-paid and post-paid customers. The two bigger mobile operators offer roaming packages with special tariffs.

Bulgaria adopted the necessary provisions allowing the imposition of fines on operators, who do not comply with the obligations laid down in the first Roaming Regulation of 2007 by an amendment to the LEC just in March 2009. The respective requirements of the amended Roaming Regulation of 2009 were included in the draft amendments of the LEC, which are expected to be enacted in the first quarter of 2010.

Fixed

Market situation

There has been no significant improvement in the level of competition in the fixed sector during the year. The incumbent had a market share of 94.0% in terms of direct access subscribers in July 2009 (compared to 96.0% one year before) and of 93.6% in terms of call revenues in December 2008. Only the market of fixed international telephone services tends to offer more choice. Fixed-to-mobile substitution − although growing − is still limited since the majority of mobile subscribers tend to keep their fixed-line connectivity in order to benefit from add-on services like internet services in bundle offers. At the end of 2008, 18% of the fixed lines were still analogue.

In general, alternative operators experience high entry barriers in the market as a result of structural and regulatory factors. The lack of competition is exacerbated by difficulties in the conclusion of interconnection agreements with the incumbent. As a result of an agreement with a large association of alternative operators, the incumbent is expected to improve the conditions for interconnection in its reference offer. The number of active alternative operators with proprietary infrastructure offering voice services was 14 in July 2009. Two alternative operators offer voice service only on the basis of carrier pre-selection (CPS) or carrier selection (CS) although the proportion of incumbent's subscribers using CS is still below 1%.

In November 2009, a major alternative telecom operator (Спектър нет) acquired another competitor (Орбител), which resulted in one of the largest fixed alternative operators, in terms of number of direct access lines.

The take-up of double-play services (cable TV and internet or cable TV and voice) and triple-play services offered by cable providers continued to grow. 28 operators offered double-play in 2008 (20 in 2007) and just 3 cable operators offered triple-play in 2008 (down from 6 in 2007), while the number of triple-play cable subscribers has grown.

By July 2009, 6.0% of the fixed subscribers were using alternative operators for national calls, and 6.3% − for international calls.

The market for leased lines − with 15 active providers − declined by 33 % in 2008 compared to one year before, mainly because fixed operators continued to invest in own infrastructure.

Regulatory issues

In June 2009, the CRC adopted its analysis and remedies on the retail markets for national and international telephone services and for access to the public telephone network. Regulatory measures already imposed on the incumbent were extended including the obligations of carrier selection, transparency, non-discrimination, price control and cost-orientation. In addition, a new obligation to provide wholesale line rental was imposed.

Although secondary legislation on carrier selection and pre-selection has been in place since November 2008, there are still problems with its functionality. Also, alternative operators complain that, while CS and CPS for long-distance and international destinations are operational, the introduction of these services for local calls and calls to mobile networks has been delayed.

The CRC adopted in March 2009 new measures on the fixed termination markets, including local, metro, single and double transit segments. These contain a glide path of reductions and symmetry between mobile-to-fixed and fixed-to-fixed termination rates. However, the CRC imposed a price cap for the alternative operators' double-transit termination rates at a level equal to the termination rate charged by the incumbent. This measure has effectuated a temporary increase of termination rates between alternative operators since 1 April 2009.

In January 2009, the CRC adopted secondary legislation on the rules for access and interconnection, which stipulates *inter alia* that an undertaking having a specific obligation for unbundled access must provide services for backhaul transport, co-location and sub-loop access. Subsequently, the incumbent modified its initial reference implementation offer for wholesale unbundled access. The analysis of the wholesale market for segments of leased lines is still ongoing and the final decision on the analysis of wholesale market for transit services is still pending.

Broadcasting

Market situation

Cable operators and satellite operators provided TV services to 1.16 million and 315 000 households, respectively, in July 2009[113] creating strong competition to terrestrial TV broadcasting. 90 operators notified to the CRC their intention to provide IPTV service.

Against the background of controversy around the aforementioned legislation on digital switchover, the acquisition of the incumbent's national terrestrial analogue broadcasting network by a foreign investor was suspended in June 2009 and was resumed later only after the new Bulgarian Government declared its intention to annul the recently adopted LPB.

The deployment of DTTV was due to start in 2009 however this process appears to be delayed due to legal proceedings regarding the authorisations of spectrum use for commercial broadcast operators.

Regulatory issues

The legal provisions on digital switchover in Bulgaria are based on a schedule set out in the plan for the deployment of DTTV, which has been approved by the Council of Ministers and last modified in December 2009. This plan foresees a two-phase introduction of DTTV broadcasting services for commercial and public broadcast operators − up to 2012 (phase one) and up to 2015 (phase two). The switch-off of analogue TV is scheduled for December 2012.

At the end of 2009, the Government announced plans to repeal the recently adopted LPB and to modify the Radio and Television Act in order to set out a new approach for the digital switchover of public radio and TV programmes, which should pave the way for public

[113] Data on analogue and digital terrestrial TV are not available.

broadcasters to also utilise the existing network infrastructure. The CRC will conduct a contest procedure in 2010 for granting spectrum rights for broadcasting programs of the Bulgarian national television and radio.

The CRC granted in June 2009 a spectrum authorisation to one broadcast operator for the construction of two phase-one commercial broadcast networks for DTTV with national coverage by 2012. Another broadcast operator received a spectrum authorisation for the construction of three phase-two commercial broadcast networks for DTTV with national coverage by 2015. Both authorisations were granted for a 15 year duration[114].

In the period until 2015, portions of the broadcasting spectrum in the 470-862 MHz frequency range (commonly referred to as the digital dividend), which are currently used for security and defence purposes, have to be released. In particular, the frequency band 790-862 MHz, which is currently allocated for national security and defence purposes with the exception of channel 64 (814-822 MHz), should be released for civil needs in the future. Bulgaria plans to follow the common EU approach for utilising the digital dividend.

In addition, the CRC granted in June 2009 101 rights of use of frequencies for analogue terrestrial TV broadcasting to five regional broadcasters. According to the terms laid down in the LEC, these rights may be abrogated as soon as these frequencies are needed for digital switchover.

Spectrum for the operation of the ground components for pan-European mobile satellite services (MSS) has already been allocated in the national frequency plan according to the requirements of European Union law. The CRC has not yet issued frequency authorisations for MSS since both designated operators are still not in a position to provide coverage over the territory of Bulgaria.

Horizontal regulation

Spectrum management

The primary legal act for frequency management in Bulgaria is the National Radio Frequency Plan (Национален план за разпределение на радиочестотния спектър), which is adopted by the Government and was last modified in 2006. In addition, the CRC maintains a list of radio equipment using harmonised frequency bands within the EU and end-user electronic communications devices. This list reflects *inter alia* the status of implementation of Commission Decisions on harmonised spectrum use.

Implementation of spectrum decisions

During 2009, the Bulgarian authorities have notified the implementation of several Commission Decisions on harmonised use of radio spectrum in the EU, namely Decision 2009/381/EC (amending Decision 2006/771/EC concerning the use of short-range devices), Decision 2007/131/EC (concerning equipment using ultra-wideband technology) and Decision 2009/343/EC (amending Decision 2007/131/EC). In addition, the national implementation of Decisions 2008/432/EC (amending Decision 2006/771/EC concerning short-range devices), 2008/671/EC (concerning intelligent transport systems) and

[114] After contests based on documentation only, no sessions including the applicants' attendance

2007/344/EC (on the availability of information regarding spectrum use) has also been notified to the Commission.

On the other hand, Bulgaria has failed to implement the Commission Decision 2005/928/EC on the harmonisation of parts of the 169 MHz frequency band. An infringement procedure was launched by the Commission in January 2010.

The Bulgarian authorities requested a prolongation of their existing derogation from Decision 2008/477/EC on the harmonisation of the 2500-2690 MHz frequency band by one year until 31 December 2011 for the whole territory of Bulgaria, on the grounds of budgetary constraints.

Rights of way and facility sharing

An ordinance on servitudes was adopted in July 2009 by the Government as an act of secondary legislation laying down rules on the rights of way for electronic communications networks infrastructure. Secondary legislation on the construction of mobile networks is still in preparation.

Amendments of the LEC of 2009 strengthened the powers of the CRC related to the control over illegal cable deployments (e.g. in the air) in urban areas. The LEC entitles the CRC to impose sizeable fines of up to € 25 600 for illegal aerial cable deployment.

Administrative charges

As a result of new provisions in the LEC the scope of administrative sanctions has been updated and amended, e.g. with respect to illegal cable installations, misleading calls to emergency numbers, misuse of personal data or roaming.

As also indicated in the previous report, the CRC does not include in its annual budgetary report or the following year's draft budget a comparison on how the levels of collected administrative charges proportionately reflect underlying administrative costs in order to provide, in accordance with the provisions of European Union law[115], a reference for verification whether adjustments may be necessary. The Commission services are looking into the matter.

THE CONSUMER INTEREST

Tariff transparency and quality of service

According to a complaint received by the Commission regarding the transition from analogue to digital telephone lines, the incumbent appears to provide in certain cases a solution for digital connectivity, which offers a lower quality and a more limited scope of service than the previous analogue fixed line. The Commission services are looking into the matter.

[115] Cf. Article 12(2) of the Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive)

Universal service

A universal service provider has not yet been designated as required by the EU regulatory framework. Following its decisions for the retail markets, the CRC started in September 2009 a designation procedure. In order to decide on the type of procedure, the CRC began by first assessing potential interest by undertakings to provide universal service. At present, the incumbent is obliged to provide universal service by virtue of the LEC, which also includes the obligation to offer special price packages for socially disadvantaged or disabled people.

An amendment to the LEC in March 2009 laid down a new pre-condition for compensating a universal service provider if its net cost represents an unfair burden. According to the current provision, only an undertaking which has no significant market power, independently or jointly with other undertaking(s), as defined by a decision of the CRC, is entitled to request compensation. As this provision appears to be contrary to applicable European Union law, the Commission services are looking into the matter. The new Bulgarian Government has proposed to repeal this condition in its draft amendments of the LEC.

A comprehensive telephone directory which, by virtue of the LEC must be provided by the incumbent became available in September 2009 after the conclusion of an agreement between the active telecommunication operators in July 2009 regarding the submission of subscriber information for the provision of a comprehensive telephone directory and directory enquiry service. The electronic format of the comprehensive directory had been approved by CRC in December 2008. The incumbent is obliged to provide directory enquiry services to all consumers and on all numbers included in the directory.

Despite the steps taken by the CRC to ensure the provision of these services, there are still difficulties in informing the subscribers and requesting their consent to be included in a comprehensive directory. Furthermore, competing providers of directory enquiry services without their own electronic communications network seem to experience high entry barriers on the market for obtaining dedicated 118 numbers, to which they are entitled only on a secondary basis[116]. The latter restriction is laid down in a governmental ordinance on the rules for granting such numbers by virtue of which a directory enquiry services provider may obtain a 118 number only from a network operator authorised to provide public telephone services or public electronic communications services accessible from numbers of the national numbering plan. The Commission services are looking into the matter.

Users' access to the Internet and network management

While in Bulgaria the issue of net freedom has not been broadly discussed, according to information provided by the NRA, only the biggest mobile operator does not allow customers to perform VoIP calls.

Number portability

The Commission has started an infringement procedure against Bulgaria for not implementing fixed (geographic) number portability (FNP). Shortly after launching the infringement, the CRC announced the conclusion of a procedure on portability between the operators and the official start of the service as of 1 July 2009. By October 2009, 1 795 fixed numbers have

[116] Providers without their own network may acquire a 118 number only from network operators

been ported[117]. However, the portability of geographic numbers for the incumbent's analogue telephone lines is still not feasible for technical reasons. According to the CRC, the remaining fixed analogue connections will have been digitised by the end of 2010. The Commission is looking into the matter.

Some alternative fixed telecom operators have appealed the CRC's decision regarding the wholesale price (€ 12.8) which the receiving operator has to pay to the donating operator for each ported number. They claim this charge is disproportionately high and harmful to the business of smaller players, in particular for cases when a group of numbers has to be ported at once.

Mobile number portability (MNP) has been available in Bulgaria since April 2008. Up to October 2009, 49 239 mobile numbers have been ported, which represents 0.5% of the total number of mobile subscribers.[118] The wholesale price of this service is regulated at € 11.2 while end customers are charged € 2.55, according to an agreement between all mobile operators.

Both FNP and MNP are based on a two-stop shop procedure, which obliges users to go first to their own operator and then to the receiving operator. This appears to cause difficulties and delays for consumers and in some cases even out-of-service periods. This is reflected in the long periods to transfer either a geographic number (15 days, compared to the EU average of 6.5 days) or a mobile number (10 days, compared to the EU average of 4.1 days) to a new operator.

In this regard, the CRC announced its intention to introduce a one-stop-shop procedure for all types of number portability at the beginning of 2010. In October 2009, the CRC started a public consultation on new functional specifications for all types of number portability, with the aim to simplify the procedure, to reduce the periods for porting a number from 10 to 7 days for a mobile number, from 15 to 7 for a fixed number, and from 25 to 10 days for a group of fixed numbers, and to establish a unified beep tone in order to warn customers who make calls to ported numbers.

Furthermore, in the light of the increasing amount of ported mobile numbers, yet high off-net prices for mobile calls, the CRC already took the initiative to introduce a short beep tone as of August 2009 in order to inform mobile subscribers when calling to ported numbers. This decision was appealed by one mobile operator, however the Supreme Administrative Court confirmed its preliminary execution so that the introduction of the beep tone in the networks of all mobile operators was functional according to the CRC as of November 2009.

Although functional specifications for non-geographic numbers were adopted by the CRC in January 2009, no related agreement could be concluded by market players, which necessitated a binding decision by the NRA in October 2009. At the time of writing the report, the enforcement of this decision was subject to judicial review before the Supreme Administrative Court.

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117 According to the CRC, by 31 December 2009, 9551 fixed numbers have been ported.

118 According to the CRC, by 31 December 2009, 55 830 mobile numbers have been ported.

Consumer complaints

The installation of mobile antennae on the roofs of residential buildings has been an issue of public concern and complaints. It has also become the subject of litigation between citizens or municipal authorities and mobile operators. Permissions for mobile antennae deployments are issued by the Ministry of Regional Development and Public Works. Control on the levels of electromagnetic radiation is within the competence of the Ministry of Healthcare. At the time of writing the report, a draft ordinance on the maximum admissible levels of electromagnetic fields in the environment was planned for adoption. In addition, a working group has been set up by the Bulgarian Government, which has the task to propose modifications to the existing legislation concerning the limitation and effective control of the levels of electromagnetic radiation.

Other major issues giving rise to consumer complaints lodged with the CRC included mobile and fixed number portability, claims for excessive billing or the deployment of overhead cables. There have been about 850 consumer complaints sent to the NRA in the period October 2008 - December 2009. In addition, the European Commission has received complaints about the rules on the provision of competitive directory enquiry services, the transparency of mobile prices, and the digital conversion of the incumbent's analogue fixed-line connections.

According to the LEC, the CRC is responsible for dealing with end-user complaints when there is a potential breach of the provisions of the LEC regarding the rights of consumers in their relations with undertakings which provide electronic communications services. The CRC is empowered to issue a view on disputes between telecom operators and may try to solve them by means of co-operation or binding instructions. The NRA has reported only one request by an operator for binding instructions during 2009.

European emergency number 112

The single European emergency call number 112 is operational in the whole of the national territory, for both fixed and mobile users. There are six 112 territorial centres which handle the calls and refer the caller location information to the appropriate service using the "push" method. A law on the national system for implementing the European emergency number was adopted in November 2008. It also includes considerable fines for abusing calls to 112.

A majority of respondents to the Eurobarometer survey[119] in Bulgaria (52%) reported having received information about 112 as the European emergency number in the past 12 months. Most of them (94%) had received the information via a media outlet, by watching television, listening to the radio, reading newspapers or surfing the Internet. Accordingly, 46% of Bulgarians knew that they can reach emergency services from anywhere in the EU by calling the European emergency number 112, compared to 25% at EU average.

According to a new provision of the LEC, the accuracy of the caller location in mobile networks is required to be less than 100 metres in towns and villages and below one kilometre in other areas.

[119] Eurobarometer Flash survey on the European emergency number 112 (February 2010)

Another new provision of the LEC refers to the imposition of serious fines (up to € 10 200) for making hoax calls and sending misleading signals over public electronic communications networks about emergency cases, in particular for all case other than calls to 112.

Harmonised numbers for harmonised services of social value (116)

The harmonised number 116111 for child helpline has been assigned to the State Agency for Child Protection.

Must-carry

Must-carry rules apply to analogue broadcast public TV programs. The draft amendments to the RTA at the time of writing the report extend the must-carry obligations also to digitally broadcast public TV programs.

E-privacy

In December 2008, the Supreme Administrative Court annulled certain provisions of the Ordinance on data retention (adopted in January 2008) concerning the rules for access to retained data by the relevant authorities.

Furthermore, in March 2009 amendments to the LEC − which were notified to the Commission as the relevant national law also for the transposition of the Data Retention Directive − were enacted concerning a number of issues including the retention for a period of 12 months of data; the categories of relevant data for the purpose of detecting and investigating serious crimes; the authorities having the right to access retained data, and the conditions for access to such data. At the time of writing the report, a draft amendment of the LEC was pending, which includes *inter alia* provisions transposing the Data Retention Directive with regard to the national supervisory authority – the Personal Data Protection Commission.

The registration of data, required for the identification of users of pre-paid services is regulated in Bulgaria. In accordance with the LEC, undertakings providing electronic communications networks and/or services are obliged as of 1 January 2010 to collect data, necessary for the identification of pre-paid users of public telephone services. In this regard, the CRC adopted secondary legislation on the rules for collecting the necessary data for the identification of users of pre-paid fixed or mobile services (in force since September 2009). It also specifies the obligation on operators to register existing pre-paid customers before 1 January 2010.

The competence for combating online malpractice is shared among different national authorities. In this regard, revision of the legislative framework and better coordination efforts appear to be necessary in order to improve the efficiency of action against spam, spyware and malicious software and to widen the focus of issues to be addressed beyond criminal cases only.

CYPRUS

INTRODUCTION

The electronic communications sector in Cyprus has not yet grasped the full potentials of a fully liberalised market. The incumbent operator, 100% state-owned, maintains a very strong presence in the fixed, broadband, and mobile markets. While there is a strong interest by market players to invest significantly in all segments of the market, delays in the decision making of the competent authorities in auctioning the frequencies for fixed wireless access or the remaining mobile licence block the market from developing. The competencies of local authorities to grant building permits for electronic communications installations add to the difficulties operators face in rolling out their fixed and mobile networks. To that end, the possibilities of having a wider choice of access products on a wholesale level, and enhancing competition at the retail level, is limited.

While there is no national information strategy in place, progress has been achieved regarding the national broadband strategy with the launching of two projects aimed at addressing the digital divide in Cyprus. The Office of the Commissioner for Electronic Communications and Postal Regulation initiated the second round of market analysis, introducing an MVNO access obligation on the SMP operator, following its analysis of the market for wholesale access and call origination on public mobile telephone networks. The adoption of a Ministerial Order amending the legislation concerning building permits brought slight improvement in the processing of applications for building permits for mobile telephony stations, yet the imposed deadlines for issuing the permits are not always adhered to in practise.

REGULATORY ENVIRONMENT

Main regulatory developments

In the scope of better enforcement of the EU and national electronic communication legislation, and more effective market regulation, the Cypriot authorities progressed with the adoption or amendment of secondary legislation while also initiating the second round review of certain markets as per the new EC Recommendation on relevant markets and products. Indicatively, progress has been achieved towards the full transposition of the provisions on rights of way, a step that completed the transposition of the EU regulatory framework into the national legal order. Legislative progress on the digital switchover also marked the reporting year. With regard to market analyses, the National Regulatory Authority, το Γραφείο Επιτρόπου Ρυθμίσεως Ηλεκτρονικών Επικοινωνιών και Ταχυδρομείων (the Office of the Commissioner for Electronic Communications and Postal Regulation, "OCECPR") concluded the second round of market review for the wholesale market of network infrastructure access at fixed location, the wholesale broadband access market, and the voice call termination markets on individual mobile networks, and took final measures.

At the same time, long-standing delays in the granting of network authorisations which require the use of frequencies continue to hamper the development of alternative broadband access networks, namely, the fixed wireless access networks (FWA, WiMAX), mobile broadband networks, and digital terrestrial TV networks (DVB-T).

On governmental level, the Ministerial Council decided in February 2009 to assign the political responsibility of information society issues to the Minister of Communications and

Works, and asked the Department of Electronic Communications of the Ministry (DEC) to develop and implement a national strategy for the promotion of the information society. Every Ministry of the Cyprus Government has to assign an information society coordinator who shall liaise with DEC to implement information society actions undertaken by the respective Ministry. Two projects are underway which aim at providing broadband coverage using satellite services to the 151 rural communities on the island currently having no broadband access.

On 4 December 2009, the DEC of the Ministry of Communications and Works along with the OCECPR called interested parties to submit applications for the granting of authorisation and right to use frequencies for the establishment of a digital terrestrial network to provide electronic communications services nationwide. The respective frequencies will be awarded by auction.

Organisation of the NRA

Regulatory tasks in Cyprus are carried out by the OCECPR and the DEC of the Ministry of Communications and Works. The OCECPR has the overall responsibility of the electronic communications market and also deals with consumers' complaints. The frequency management tasks are carried out by the DEC, and *ex post* regulation of the sector is decided by the Commission for the Protection of Competition.

In January 2009, a new Commissioner of Electronic Communications and Postal Regulation was appointed following the resignation of the former Commissioner. The Cypriot national regulator has a staff of 34 employees.

In general, market operators consider that the regulatory actions of the competent authorities often are delayed and inefficient (e.g. national broadband strategy, frequency management). In particular, they consider the OCECPR to be under-staffed, a situation that renders delays in its work (the processing of complaints and dispute resolutions, the delay in decision-making and enforcement of regulatory decisions following market analysis). Lastly, operators' criticism referred to repeated amendments to the structure of the Commission for the Protection of Competition since 2005, rending the *ex post* control of the market's competition level problematic.

Decision-making

During 2009, the OCECPR initiated the second round of market analyses for markets listed under the Commission's Recommendation on relevant products and service markets of December 2007, and for those markets which are no longer recommended by the Commission for *ex ante* regulation. Final decisions were taken for the market for wholesale network infrastructure access at fixed location, and the wholesale broadband access. OCECPR's final decision on the wholesale market on access and call origination on public mobile telephone networks was expected to be taken in November 2009. The Cypriot regulator plans to notify the analysis of all remaining markets in 2010.

Twenty of the OCECPR's decisions relating to market analyses have been appealed, all these decisions but one were appealed by the incumbent. Four of these decisions were upheld by the Supreme Court while eight of them were overruled. Judgment on five cases is still pending (in two cases for more than two years), while judgement for two cases has been reserved. The

OCECPR's decisions on these cases stand until the Court rules on the cases. During 2009, none of the operators' complaints was classified as dispute resolution.

MARKET AND REGULATORY DEVELOPMENTS

The total revenue of the Cyprus electronic communications sector in 2008 was €579 million, of which €131 million came from the fixed market and €286 million from the mobile market. Compared with the revenues figures of 2007, the mobile market increased its revenues by 8.8% while revenues for the fixed sector remained stable. Investments in the electronic communications sector totalled €110 million, of which €53 million were made by the incumbent in the fixed telephony network, €35 million by alternative operators, and €27 million by mobile operators. The investment over revenues ratio in the Cyprus telecom sector for 2008 was 19.0%.

Market operators consider that the prevailing economic crisis in 2009 impacted mostly their business market since a number of their business clients closed down their operations and thus, cut off their subscriptions. One operator referred to lay-offs of staff at its retail branches. All operators confirmed that their investment plans remained for the moment unchanged.

In July 2009, 3.4% of the Cypriot population used bundled services offered by 4 operators. The market offerings include double-play and triple-play services providing combinations of fixed voice, broadband access and IPTV. In December 2009, the second mobile operator announced an offer on mobile bundled products which includes fixed broadband access, mobile voice/data and fixed voice.

Strong intentions by market operators to invest in network deployment are depicted during the reporting year. The incumbent plans to upgrade its existing copper network with VDSL to offer higher broadband speeds nationwide. An alternative fixed operator established its own submarine cables getting access to international capacity other than via the existing cable. The second mobile operator announced plans to upgrade its network infrastructure so as to provide fast Internet services across Cyprus. Also, the auctioning of the remaining mobile frequencies, or the opening of the tender for WiMAX frequencies attracts a strong interest by market operators. To date, the Cypriot electronic communications market is still dominated by the incumbent's high market shares in all the segments of the market (fixed, mobile, and broadband).

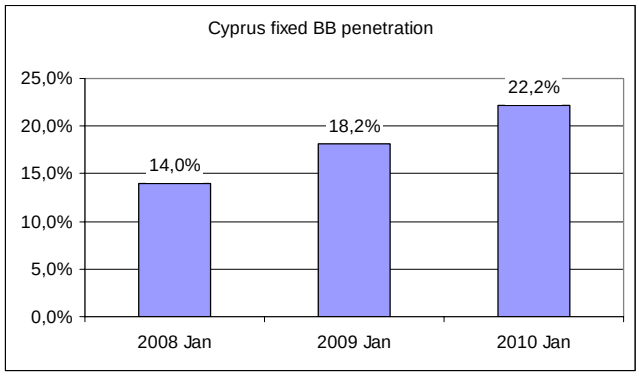
In view of its new tasks to develop and implement a national strategy for the promotion of information society, the Department of Electronic Communications of the Ministry of Communications and Works announced two projects as immediate steps to address the digital divide in Cyprus, to achieve 100% geographical coverage by 2012. The first project envisions the establishment of satellite services to provide basic Internet connectivity to areas in Cyprus where no broadband services of any kind are available ('white areas' - 151 rural communities) of 1Mbps for every 5 users. The project is currently underway, and is expected to be finalised by February 2010.

The second project foresees a fibre optic infrastructure that will be deployed in the same 151 rural communities. These communities have been grouped in 5 different geographical clusters. They will be connected to the existing backbone network by bringing the fibre optic network to a point of network presence in the community. Any access technologies can be used in the last mile network to offer broadband services to the end users. The state support would fund the creation of passive and active backhaul infrastructure in all five clusters.

Tender procedures will be opened for each cluster, with applicants having to submit five different proposals for all five clusters. Only four of the clusters can go to one operator. The project aims at being co-financed by the Agricultural Rural Development Plan and the Structural Fund, and from the national budget. Its total cost is estimated at €11 million. The Cypriot authorities submitted this project to the European Commission for examination under state-aid rules. On 11 December 2009, this state-aid project received the approval of the European Commission.

Broadband

Market situation



Broadband penetration grew considerably to 22.2% in January 2010 compared to 18.2% in January 2009 (EU average 24.8%). Cyprus recorded the highest number of new fixed broadband lines per population (4.0 new broadband lines per 100 population) denoting the development potential of the market.

The total number of broadband lines reached 176 024 in January 2010, representing an increase of 22.8% within a year. The market share of broadband DSL lines denotes the predominance of the DSL technology (94% in January 2010). The DSL retail lines reached 165 854, increasing by 18.7% within a year to January 2010. The number of broadband lines using technologies other than DSL (mainly cable) considerably increased during the reporting year (from 3 612 lines in January 2009 to 10 170 lines in January 2010). Yet, the figure represents only 5.8% of the total broadband lines in Cyprus, and makes Cyprus the country with the second lowest share of such lines among EU countries.

During the reporting year, the incumbent operator maintained its strong share in the retail broadband market in Cyprus (its share decreased from 80.8% in January 2009 to 78% in January 2010), and its lead as the incumbent operator with the highest market share on this market in the EU. Alternative operators were mainly investing in local loop unbundling (71.4% of their retail access lines were fully unbundled lines in January 2010). Broadband access lines of alternative operators via cable modems increased significantly from 3 313 lines in January 2009 to 9 772 lines in January 2010.

The majority of fixed broadband lines in Cyprus are within the range of 144 Kbps and below 2 Mbps (74.7%) and around 25.2% of the total lines are of the range 2-10 Mbps. While the speeds of the fixed broadband lines increased during the reporting year, Cyprus is still one of the EU countries where low broadband access speeds are offered to the market.

While the monthly average cost per shared access in Cyprus is well below the EU average (3.5€) amounting to 2.8€ in October 2009, the respective monthly average total cost per fully unbundled loop reaches 11.2€, which is higher of the EU average of 9.7€. The latter cost increased by 8% during the reporting year.

Mobile broadband is available from both MNOs; yet, its take-up has been so far limited. By January 2010, it had a marginal share of 1.1% (calculated as the number of dedicated data

services via service cards, modems, and USB keys), which is the lowest share on the EU markets, and well below the EU average of 5.2%.

Regulatory issues

On 8 May 2009, the OCECPR published its final decisions concerning the market for wholesale network infrastructure access at fixed location and for wholesale broadband access. The OCECPR designated the incumbent as an operator with significant market power in both markets and imposed obligations for full and shared access to its local loops and sub-loops on a non-discriminatory and transparent basis with cost-oriented prices based on the LRIC costing methodology. For both markets, the price control obligation is to be applied in conjunction with a margin squeeze evaluation model. The incumbent is also obliged to publish a Reference Unbundling Offer (RUO) and a bitstream Reference Offer. Furthermore, the provision of naked DSL access and of DSLAM access (where technically possible) is imposed on the incumbent. While excluding from this market analysis any future developments of fibre access networks in Cyprus, due to lack of substitutability proof, the OCECPR committed to re-visit its analysis in the event that market players would proceed with the deployment of fibre access networks on a larger scale.

The incumbent complied with its obligation and a new RUO was published on 2 September 2009. After having revised some of the RUO's provision, the OCECPR called interested parties to submit their input on the revised text and held a public hearing on 17 November 2009. At the time of drafting this report, the OCECPR's amendments to the RUO were pending. In any case, new wholesale access products are now being offered, signalling a positive development for enhancing competition on the retail market. However, their take-up has so far been limited. Bitstream connections were marginally preferred (355 lines compared to 26 852 LLU lines in July 2009) while WLR subscribers amounted to 826, around 6% of the CPS subscribers. The low take-up can be attributed to the fact that in Cyprus, local loop unbundling was firstly made available (with alternative operators investing primarily on this). It is also worth pointing out that on the retail level, broadband access in Cyprus is usually offered with IPTV. Thus bitstream and WLR access products, both not able to offer such a bundled possibility, are found not to be popular. Indications for the take-up of DSLAM access are not yet evident. Naked DSL is possible since the publication of the Bitstream Reference Offer by the incumbent in September 2009.

The RUO 2009 includes an additional regulatory measure important for the development of ADSL2/2^{+} and VDSL2 networks. This relates to the obligation of the incumbent to establish and publish an Access Network Frequency Plan (ANFP) for its copper network which would enable the coexistence of different xDSL networks. Aimed at minimising interference from the different xDSL signals generated by the use of access network resources, the ANFP should define an environment of stability for the broadband services offered, encouraging to this end, investments in infrastructure development and take-up of retail broadband products. The ANFP provisions have been applicable on all market operators since March 2009, measurements regarding the establishment of frequency masks at all injection points were completed by December 2009.

Mobile

Market situation

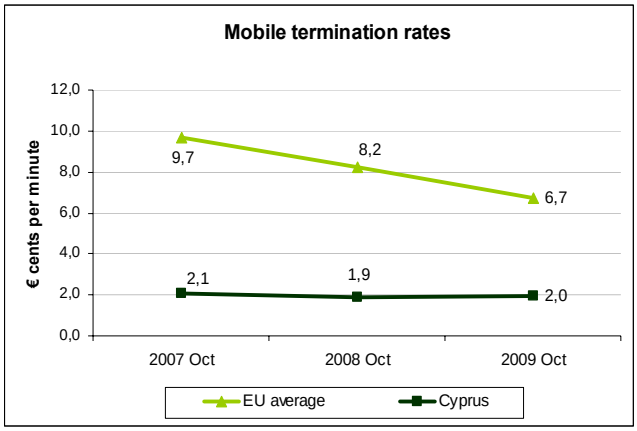
The mobile penetration in Cyprus based on mobile active subscribers continued to rise, reaching 135.7% in October 2009, compared to 126.1% a year ago, well above the EU average of 121.9%. The market is served by two MNOs, both having 2G and 3G licenses.

The market share of the incumbent's mobile arm in terms of subscribers was 82% in October 2009, a decrease from 85.2% in October 2008. The second MNO had a market share of 18%, increasing its presence in the market from the year before (14.8% in October 2008).

Consumers of mobile telephony opt by 60% to have prepaid services to 40% having post paid contracts with mobile operators. No mobile bundled products are yet available.

The level of mobile termination rates in Cyprus continues to be the lowest in the EU, amounting to 1.95 €-cents; in fact, these are three times lower than the EU average of 6.70 €-cents.

Regulatory issues



On 23 June 2009, the OCECPR took final measures on the analysis of the second round review of the market for voice call termination on individual mobile networks. Both mobile operators were found to have SMP in their respective mobile termination markets, and obligations were imposed on them in respect of transparency and non-discrimination, access and cost-orientation (based on LRIC), and price control. Accounting separation was also imposed, with a delay granted to the second operator (in terms of market share) for the implementation of this remedy, until its annual turnover reaches €50 million. During the period of 1 January 2010 – 31 December 2012, the termination rates of the second operator have to be progressively reduced to reach a certain pre-defined percentage on top of the first operator's mobile termination rates (MTRs). For the first year of this 3-year glide path, the MTRs of the second operator should be equalled to 35% above the cost-oriented MTRs of the first operator. This percentage would decrease to 13% above the cost-oriented MTRs by the end of 2012.

OCECPR carried out an analysis of the wholesale market for access and call origination on public mobile telephone networks, having first applied the three criteria test. The market was found not to be competitive, with the incumbent having SMP. OCECPR maintained all remedies imposed in the first round analysis, yet withdrawing the carrier selection obligation. It introduced an obligation for MNVO access, long awaited by the market operators, thereby broadening the scope for competition in the retail mobile market. The OCECPR run a public consultation on its decision for this market (18 November – 16 December 2009), with the final decision expected to be published by early 2010

In regards to the obligation for national roaming[120](maintained also in the second market analysis), the Supreme Court of Cyprus recently ruled on a case brought to the Court by the second mobile operator, who appealed the NRA's decision on the level of wholesale roaming prices. Set at 3.66 €-cents in 2008, the complainant claimed that the prices were too high. The Court's decision on 31 July 2009 ruled that the OCECPR did not have the authority to impose national roaming citing that 'roaming' could not be considered 'access'. Following that, the national law on electronic communications was amended to include provisions in the definition of 'roaming' which specified that roaming could be considered 'access'.

The Cypriot authorities are currently considering taking steps in awarding available spectrum in the 900-1800 MHz bands based on technological neutrality conditions for mobile licenses. Market stakeholders expressed different views as to whether one or two mobile licenses should be awarded taking into consideration the size and the current level of competition in the market. The OCECPR run a separate public consultation on the issue concluding that one further license should be introduced into the market, and submitted its observations to the DEC. A final decision on the awarding of the available spectrum will be taken by the DEC. It is worth noting that any restrictions on the issue of a third mobile license deriving from the provisions of the second mobile license elapsed in December 2008[121].

The possibility of the auctioning a further mobile license and the imposition of MVNO access are expected to boost infrastructure competition in the mobile market as market entry would be feasible, but also retail competition as new products and services, bundled or converged, may be offered to consumers.

Roaming

Both MNOs have complied with the provisions of the amended Roaming Regulation of 2009. A general observation from the MNOs is that data roaming prices decreased due to the regulated wholesale tariffs.

Fixed

Market situation

As in the broadband and the mobile market, the incumbent operator commands a large share in the fixed market but with a decreasing trend due to the increasing penetration of the alternative operator (mainly through the local loop). In December 2008, the incumbent's market share by retail revenues was 84.0%, decreasing from 90.0% a year ago. The decrease in its market share is mirrored in both the national and international calls market, but it is in latter market that the decrease was stronger (79.0% in December 2007 decreasing to 69.0% in December 2008). The incumbent maintained 92.0% of the market of calls to the mobile network during the reporting year.

120 Wholesale national roaming prices are calculated based on retail minus methodology.

121 According to the Contest Documents for granting the second MNOs license with Ref. No. MCW/OCTPR 1/2003 on "Auction for the Grant of Individual Licenses Authorising the Use of Spectrum and the Establishment and Operation of One Mobile Public Telecommunications Network and the Provision of Mobile Public Telecommunications Services in Cyprus", Nicosia, 10 July 2003, the reserve spectrum was not to be licensed for a period of 5 years or until the new entrant had achieved a market share of 25%, whichever comes first.

The Cypriot subscribers still vastly choose the incumbent for direct access in 91.0% of the cases, more than the EU average of 75.9% in July 2009. More subscribers than last year choose the alternative operator for direct access (5.0% in July 2008 to 9.0% in July 2009), yet not as many as the average number of subscribers in the EU (24.0%).

Fixed termination rates (FTRs) in Cyprus for local interconnection, single and double transit are all well below the EU average. Analytically, the FTRs for local interconnection amounts to 0.34 €-cents in Cyprus compared to 0.52 €-cents in the EU. For the single and double transit, the FTRs equal to 0.55 €-cents and 0.63 €-cents in Cyprus while the EU averages amount to 0.79 €-cents and 1.09 €-cents respectively.

Regulatory issues

The national regulatory authority run a public consultation for its analysis of the retail market for access to the public telephone network a fixed location for residential and non-residential customers on 23 November 2009 – 5 January 2010. It intends to designate the incumbent as having SMP in both markets, maintaining the remedies imposed during the first round of market analyses.

The OCECPR intends to notify this market along with its analyses of four retail markets and one wholesale market, which are no longer recommended by the Commission for *ex ante* regulation, in 2010.

Broadcasting

Market situation

In Cyprus, the main platform for the provision of broadcasting services is analogue terrestrial TV (100%). End-users also receive broadcasting services via cable TV (1.9%), satellite TV (4.4%), and IPTV (19.6%). This data portrays the high uptake of IP-TV during the reporting year, as its penetration percentage rose from 4% in July 2008 to 19.6% in July 2009. The development is attributed to the increase of subscriptions for triple-play services combining broadband access, fixed telephony and IPTV.

Regulatory issues

Cyprus intends to move to full digital broadcasting on 11 July 2011. The digital transmission is expected to commence within the second trimester of 2010. The geographical coverage of the two digital platforms, one of the public broadcaster (one multiplexer) and one of the operator who will be granted the licence by auction (five multiplexers), will be progressively extended until the final analogue switch-over.

Although discussions are ongoing, no concrete plans have been taken yet in Cyprus for the digital dividend. The Cypriot authorities have requested to register another 5 multiplexers for digital terrestrial TV under the GE06 Plan of the Geneva Agreement 2006 of the International Telecommunication Union relating to the analogue and digital broadcasting assignments and allotments.

During 2009, the OCECPR issued three relevant Decrees to facilitate the introduction of digital terrestrial TV in Cyprus. It specified the obligations related to the access to Application Programme Interfaces and Electronic Program Guides. It also defined the technical

requirements of digital television consumer equipment, and set the rights and obligations of the DTT network and service providers related to access to the DTT networks.

On 18 November 2009, the OCECPR mandated MPEG4 standard definition to be adopted. The DEC and OCECPR issued a call for applications for the authorization of the frequencies for terrestrial digital television networks on 4 December 2009. An auction for these frequencies is expected to take place on the first semester of 2010.

Horizontal regulation

Spectrum management

The introduction of Fixed Wireless Access via an auction process, long-awaited by the Cypriot electronic communications market, has not yet materialised. Initial steps to this end were first taken in 2006 with the running of a public consultation in April 2006. At the time, the intention was to license the frequency bands 3.4-3.6GHz and the 24.5-26.5GHz. The incumbent was to be excluded from the tendering process. Following repeated delays in the process, the DEC is currently considering the possibility of including the frequency band 3.6-3.8GHz in the tender as well. Further delays in the fixed wireless access licence auction hamper the development of the sector, since all available access means currently are owned by the incumbent.

Implementation of spectrum decisions

Cyprus has implemented all the Commission's spectrum Decisions up until 2008. The implementation of Decision 2007/344/EC on the harmonised availability of information regarding spectrum use is still under way. The two EC Decisions adopted in 2009, namely Decision 2009/381/EC amending Decision 2006/771/EC on short-range devices and 2009/343/EC amending Decision 2007/131/EC for equipment using ultra-wideband technology in a harmonised manner in the Community, are in the process of being implemented.

With regard to the implementation of the Decision 2009/766/EC on the harmonisation of the 900MHz and 1800MHz frequency bands for terrestrial systems capable of providing pan-European services in the Community (amended GSM Directive), the DEC was planning to initiate a dialogue with the MNOs to specify the terms based on which their licences would be amended to allow the deployment of UMTS networks in these frequency bands.

Administrative charges

A public consultation was held in November 2009 on a draft OCECPR decision to amend the secondary legislation on administrative charges, aiming at simplifying the method used for their calculation.

Rights of way and facility sharing

Long-awaited by the market, the pending Ministerial Order which aims at providing for the exemption of certain mobile telephony stations (regardless of their weight and diameter) for obtaining building permits when installed on existing licensed antenna masts, and the specifications of certain deadlines for the processing of applications, was finally adopted in June 2009.

Explicitly, the said Decree finalised the implementation of the 'Code', a general comprehensive framework entitled "policies and procedures for the installation and operation of radio communications stations" which includes the procedures for the granting of town planning and building permits for the erection and installation of base stations and antennas. The said Decree provided that the maximum time limit for examining applications for building permits is 4 weeks for stations of less than 600 kg installed on the roof of an existing building, or a mast for which a building permit has already being granted, or 4-metre diameter for a mast installed on the ground. For any other type of base stations, the time limit for examining applications is prolonged to six weeks. Market operators noted the slight improvement in the processing of their applications, yet they strongly voiced their disappointment as the said deadlines are not always adhered to in practice. At the end of the reporting year, the case regarding the granting of rights of way for mobile networks in Cyprus was pending before the European Court of Justice (C-125/09).

Concerns were expressed regarding a specific provision of another 'Code' regarding "rights of way in public roads" whereby the OCECPR, being the competent authority for the coordination of the procedures of rights of way in public roads, approves the acquisition of rights of way in areas where there is existing electronic communications infrastructure, when it is convinced that collocation to the existing infrastructure is not possible, or if rights of way are required for technical or technological reasons.

In certain cases, the competence of the local authorities to approve building permits (as provided by the building permits' acts) seems to block the deployment of alternative networks on the island, and in effect delays the establishment of competition in the market. Specifically, the situation arose when one municipality in Cyprus repeatedly denied giving a building permit for an interface point that would allow the alternative operator to land its submarines cables on the land and thereon, deploy its network. The matter has been addressed by the competent Ministries and talks are currently undertaken to resolve the issue.

THE CONSUMER INTEREST

Universal service

In March 2008, the incumbent operator was designated as the universal service provider for a period of three years for all elements and for the whole territory. Currently, the OCECPR is examining whether to extend the scope of the universal services to cover broadband. A consumer market survey was launched in October 2009 to explore demand and user needs. Based on the feedback received, the OCECPR will develop its policy on the issue. In addition, OCECPR will submit its proposals regarding the issue of increasing broadband penetration to the Ministry of Communications and Works, which is responsible for taking relevant actions. During the reporting year, the Cypriot authorities held a number of informative meetings with local authorities in an attempt to address the public health concerns on radiation from mobile networks.

Number portability

Operators have 14 working days to port fixed and mobile numbers. Current practise suggests that the procedure takes no more than 5 working days to port a fixed number (where the EU average is 6.5 days) and 4 days to port a mobile number (where the EU average is 4.1 days). No retail costs are imposed on consumers.

There was an increase of 37.3% from October 2008 to October 2009 in fixed and mobile ported numbers during the reporting year. A total of 74 095 numbers were ported, out of which 40 473 were fixed numbers (54.6%) and 33 622 were mobile numbers (45.4%).

Consumer complaints

The OCECPR is the responsible authority to handle consumers' complaints and disputes relating to electronic communications products and services. During 2009, the national regulator received a small number of complaints (around 40), the majority of which were found unreasonable. Others related to the time needed for connection to the fixed network, and the disconnection of fixed lines following a second warning by the operator. The OCECPR did not impose any fines on complaints.

In an attempt to increase awareness of consumer rights in the electronic communications sector, the OCECPR is intending to issue a consumer guide on services in 2010.

European emergency number 112

In Cyprus, emergency calls are made to both 112 and to 199, the national emergency number, with both numbers answered by the Cyprus Police. Calls can be handled in Greek and English. Indicatively, around 40 000 calls where made to 112 emergency number in the month of September 2009. Around 95% of the calls to 112 number are being answered in 20 seconds. The 'Pull' forward technique for the provision of caller location information is currently used by the incumbent for fixed calls and by the second MNO for mobile calls, while the 'Push' method is used by the incumbent for calls made from mobile networks.

A number of public awareness measures for the 112 emergency number were undertaken in Cyprus. Those include a film prepared by the Cyprus Civil Police which was transmitted nationwide by TV channels, magnets with the 112 sign were disseminated to all households, pamphlets being disseminated to schools, and the 112 number being displayed on vehicles of the emergency services and at the official website of the Cyprus Government.

Harmonised numbers for harmonised services of social value (116)

On 3 July 2009, OCECPR issued a call for expression of interest regarding the three EU harmonised numbers for hot and help lines for social services. The 116000 number is to be assigned to missing children, the 116111 number is intended to be used for providing help to children in need, and the 116123 number is aimed at providing moral support to people. At the time of drafting this report, the numbers 116111 and 116123 have been allocated to a non-governmental organisation. As there was no interest for the number 116000, a public invitation will published anew. Numbers 116006 and 116117 have been also made available through an amendment of the national Numbering Plan.

CZECH REPUBLIC

INTRODUCTION

Infrastructure based competition remains to be the main determinant for the broadband market dynamics. The penetration rate of broadband continues to increase but the pace of broadband growth has gradually slowed down. The highest subscriber gain was related to DSL. Investments into NGA networks have been limited so far. Mobile market is reaching saturation. The shift of the market towards convergence of mobile and fixed services becomes more pronounced. The fixed voice and cable markets experience further consolidation.

The second round of market reviews has been finalised for all markets excluded from the current Recommendation[122]. Review process has progressed also for the origination and termination markets. The regulatory efforts directed at the broadband-related markets have not yet triggered the intended results of stimulating more effective competition in DSL platform. A national project for broadband access development is not present, nevertheless, the Ministry of Industry and Trade is preparing a new government policy in electronic communications the "Digital Czech". Progress in digital switchover has lead to analogue switch-off in two regions.

REGULATORY ENVIRONMENT

Main regulatory developments

A draft amendment to the Electronic Communications Act was submitted to the Parliament by the Government. The proposal included *inter alia* a conversion of the current universal service financing system into a compensation mechanism based solely on public funding; an introduction of new powers for the NRA to withdraw a frequency assignment in cases where operators do not use the assigned spectrum within a specified time period; and a proposal to reinforce the level playing field in access to subscriber data for providers offering directories outside the system of universal service. Several supplementary minor amendments to the Act have been introduced via other legislation.

The Czech regulator *Český telekomunikační úřad* (Czech Telecommunications Office), ČTÚ, has continued to progress with the process of market reviews. The NRA has completed its second market review for all markets excluded from current Recommendation that had previously been found non-competitive. Additionally, three wholesale markets that are listed have been newly reviewed.

ČTÚ modified the national radio spectrum utilization plan in relation to the 900 MHz and 1800 MHz spectrum bands[123]. Public consultation on the draft amendments related to 2.6 GHz spectrum band is ongoing. The modifications were proposed in order to reflect the changes of spectrum management brought forward with the amended GSM Directive as far as concerns

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122 Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC, OJ L 344/65, 28.12.2007.

123 The respective modifications related to 900 MHz and 1800 MHz bands were adopted in December 2009.

usage of technology. The Ministry approved an amendment to the national numbering plan, effective from September 2009.

Organisation of the NRA

The official term of office for the chairman of the Board of the NRA expired at the end of March 2009. After a short interim period, the previous chairman was re-appointed again at the end of April for a period of one year. Furthermore, the term of office for one member of the Board expired at the end of April 2009, followed by an appointment of new member for a five-year period starting from 1 May 2009.

Decision-making

In the course of the reporting period, a continuing progress has been noted in the process of market reviews where ČTÚ notified the results of the second market review with respect to five markets. Based on the results of the three-criteria test, regulation has been lifted from all remaining former retail markets and the former wholesale broadcasting market. New market reviews have been carried out concerning the wholesale markets of fixed termination and origination, and mobile termination, proposing *inter alia* further reductions in price caps. These remedies were yet to be adopted through a final measure. The notification of the second market review for the local loop unbundling (LLU) market was withdrawn in July 2009.

As regards the scope of remedies proposed in relation to the termination markets, the NRA takes the approach of differentiation between the incumbent players and alternative operators. No price regulation and softer remedies have therefore been proposed with respect to the latter. The Commission, however, emphasises the need to respect regulatory symmetry based on the costs of an efficient operator in these cases. The price regulation proposed for the mobile termination, although not yet implementing a long-run incremental cost (LRIC) model, excludes specific types of costs from the calculations in an attempt to steer the present fully allocated historic costs (FAHC) model more closely to the Termination Recommendation[124].

The wholesale remedies imposed previously by ČTÚ with the aim of resolving the issues of concern presented by alternative operators do not yet seem to have triggered a significant market response. The regulator carried out several investigations and resolved disputes in relation to effective implementation of the imposed remedies. Where considered warranted, the significant market power (SMP) operator was obliged to modify the respective reference offer. Investigations of a margin squeeze performed upon request of the fixed alternative players have not confirmed the existence of such practises.

MARKET AND REGULATORY DEVELOPMENTS

Total turnover and investment figures for 2008 show a mixed picture in comparison to 2007[125]. The total turnover of the telecommunications sector was €5.7 billion; the specific revenue from the fixed market increased by 2.1%), whereas the revenue from the mobile market increased by 3.2%). The total value of tangible investments was €594 million (decrease of 2.9%); investments made by mobile operators decreased by 4.7%, while the

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124 Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, OJ L 124/67, 20.5.2009.

125 The total turnover and investment figures have been updated since the publication of the last report.

investments made by fixed alternative operators increased by 22.5%, and those coming from the incumbent operator decreased by 13.3%. The total revenue amounted to 3.8% of the national GDP in 2008.

The tendency of the market to provide bundled services and converged fixed-mobile offers, noted in the previous reporting periods, has been reinforced. The incumbent has already been established as a converged fixed and mobile operator since 2007 (Duo Mobile offer). Through acquisitions in the fixed residential market, the biggest mobile operator (by number of subscribers) can now provide converged services on a national level. Although such services have not yet been picked up by customers to a great extent, they already appear to signify a prevailing trend for the future market development. The converged services have previously been provided tailor-made and mainly for business customers, however, an extension of scope towards residential segment of the market is starting to become visible. For example, the incumbent's restructured retail offer available from May 2009 simplifies their product portfolio by establishing 'basic' services (voice, asymmetric digital subscriber lines - ADSL, or internet protocol television - IPTV) which may be combined with any selection of top-up services; a move in this direction is also evident with the aforementioned residential acquisitions of the largest mobile player. The shift towards provision of triple play services is notable also with regard to cable operators. Increasingly, even smaller operators are developing voice services to be offered besides the provision of broadband and traditional TV service.

3G infrastructure development has continued in a slow pace. A nation-wide 3G coverage has not yet been achieved by any of the players. The incumbent's Universal Mobile Telecommunications System (UMTS) network's coverage is 16.5% of population while its Code Division Multiple Access (CDMA) data network reaches the coverage of almost 90% of population. Its intention was to finalise the roll-out of 3G infrastructure in 14 largest cities by the end of 2009. The largest mobile operator offers services via UMTS using Time Division Duplexing (UMTS TDD) with 60% of population coverage, and plans to commence a pilot project for UMTS High Speed Downlink Packet Access network (HSDPA). In March 2009, the smallest GSM operator initiated a commercial provision of its UMTS network with coverage in two main cities – Prague and Brno. The latest market entrant uses CDMA technology for provision of data and voice, reaching population coverage of 84%.[126]

Developments regarding investments into next generation access (NGA) networks have been minimal. The NRA has estimated approximately 300 000 fibre loops covering 8% of households[127]. In general, fibre network infrastructure is limited mainly to metropolitan and 'greenfield' areas. Local broadband network operators including cable operators play a significant role in the deployment of fibre to the x (FTTx).

A shift towards optical networks has been noted with some WLL operators, which gradually replace their WLL networks and offer their services using a combination of optical and metallic infrastructure (fibre to the building – FTTB). This trend, however, is limited in scope and geographical scale. The incumbent does not provide any commercial fibre-based services.

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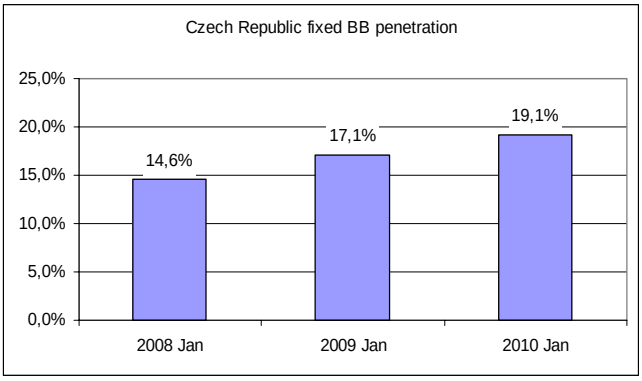
126 The coverage data presented is based on information received from ČTÚ.

127 Data as of September 2009 provided in the notification sent to the Commission with respect to review of the LLU market, case CZ/2009/0933.

Broadband

Market situation



The fixed broadband penetration rate increased by 2 percentage points from 17.1% of population in January 2009 to 19.1% in January 2010. In the European ranking of the fixed broadband penetration, the Czech Republic maintains its place below the EU average of 24.8%, and well behind the European top performers. Despite the continuing growth in the number of retail fixed broadband access lines, the pace is gradually slowing down: 233 659 new lines were added between January 2009 and January 2010, compared to 272 764 lines between January 2008 and 2009. As regards speed parameters, the market situation reflects that of 2008: approximately 75% of the fixed broadband retail lines deliver speed in range of 2-10 Mbps, while the remaining ones offer speed above 10 Mbps[128]. The highest broadband speeds (100 Mbps) are provided by cable network operators in limited offers. Broadband access based on mobile technologies is slowly gaining in numbers with the penetration rate for dedicated data services reaching 3.5% of population and more than 370 000 active subscribers.

The Czech fixed broadband market continues to be characterised by an extensive infrastructure based competition. In 2009, the market has not experienced much dynamics in terms of shifts amongst the individual infrastructure platforms. The market shares of the prevailing technologies are thus very similar to those of 2008: digital subscriber lines (DSL) (38.8% of total fixed retail lines), wireless local loops (WLL) (33.9%), and cable (22.0%). The extent of market share of fibre technology (FTTx) is still very limited (5.2%). New entrants compete mostly using infrastructures other than DSL.

The highest gain in broadband subscriptions was reported for DSL, followed by WLL and cable. Geographical constraints influence the level of competitiveness for cable operators, as the networks are generally limited to densely populated areas. WLL providers, on the other hand, may face constraints as to speed levels achieved. On the other hand, DSL is affected by retail offers of competitive technologies such as cable and WLL. The platform competition exerts competitive pressures which appear to be leading to gradual declines in retail prices, at least for cheapest offers. Partially as a response to provision of wholesale naked DSL, the incumbent started to provide its own retail 'naked' ADSL service (no longer bundled with mandatory line rental or voice service) in May 2009.

Despite a relatively well established position of the new entrants in the overall fixed broadband market (66.1% of retail lines), the incumbent's standing in the DSL segment remained unchallenged. In fact, its DSL market share in 2009 followed the trend noted already in the previous reporting period and increased slightly to 87.0%. The number of fully unbundled lines has increased slightly, but on the other hand, the usage of other wholesale products such as shared lines and bitstream access went down. The wholesale bitstream

[128] Data from July 2009. January 2010 data not available.

product from the regulated reference bitstream offer has been taken up. A voluntary wholesale line rental (WLR) offered by the incumbent is used by one alternative player.

Two major fixed alternative players have sold their residential segment of the market to the largest mobile operator (one player including LLU infrastructure), maintaining only their business customers. Such development illustrates the reinforcing drive to offer converged fixed and mobile services, as now at least two major players are able to offer such services either via their own network or in combination with wholesale broadband products. The third mobile player also expresses motivation to strengthen its converged presence, in line with the concept of a 'total telco'. Mobile operators thus increasingly consider fixed broadband to be a core basis of their broadband service provision, complemented by mobile broadband. However, such market trend leaves the fixed alternative players without a viable competitive alternative.

Small local public broadband projects have been reported (municipality driven). A national broadband project/scheme coordinated at the Government level is not present, nevertheless the Ministry is preparing the new government policy on electronic communications the "Digital Czech".

Regulatory issues

The new regulation for the bitstream market adopted in January 2009 now includes a long-standing demand of alternative players (fixed and mobile) for the naked DSL facility. Provision of naked DSL appears to have facilitated some alternative players to offer more price competitive DSL service. Migration of customers into bitstream in bulk was made available as a reaction to one of the concerns presented by alternative providers. However, new entrants note that with regard to provision of satisfactory quality guarantees, other products outside the reference bitstream offer (RBO) have to be negotiated commercially. There is no price regulation applicable for the bitstream market. On the basis of the initiative from alternative players, ČTÚ has carried our several investigations of a possible margin squeeze, however, this was not confirmed. In parallel, a price squeeze investigation has been initiated by the National Competition Authority. A third review for the broadband wholesale market is in preparation.

Conversely, LLU prices have been regulated since 2005. The latest price drops became effective in January 2009, however, the total average cost for a full LLU at €11.64 is still above the EU average of €9.75. Following an investigation of ČTÚ related to an effective implementation of remedies imposed in the LLU market, several changes intending to improve the conditions regarding financial quality guarantees, order processing, minimum settings for collocation, and access to non-active infrastructure have been introduced in the reference unbundling offer (RUO). Despite these efforts, further uptake of LLU has been marginal; there are no signs of plans for further investment into LLU.

The NRA prepared a second review of the LLU market, notified to the Commission in June 2009, and withdrawn a month later. A modified market analysis is currently under preparation; the NRA indicated to include alternative technologies, in particular fibre, into market definition. The regulator formulated its position on future NGA regulation and carried out discussions in this respect at a specialised workshop with market players in November 2009. Building on the workshop, the NRA published its report outlining the regulatory issues concerning next-generation networks in December 2009. The report is to service as a basis for further discussions with national authorities and stakeholders.

Overall, the impact of remedies imposed on broadband-related markets appears to be still limited. The effects may have been constrained by the ongoing market consolidation and potential competitive advantages of platforms other than DSL, nevertheless, the market share of the fixed alternative players in the DSL segment is experiencing a slow but continuing downward trend. Further uptake of DSL may be triggered using the marketing power of mobile operators. The Commission, while monitoring the market developments, invites ČTÚ to review the potential bottlenecks in these markets and address them through effective enforcement of the remedies already in place and in the market reviews currently under preparation.

Mobile

Market situation

Mobile penetration is high at 134.0% of population. It appears that the mobile market is reaching saturation as the growth trend in the number of subscribers has been decreasing. Similar developments in terms of limited growth can be observed with respect to volume of traffic. On-net calls represent the most important revenue source. As concerns SMS (short message service), the market still experienced an upward usage trend. There are continuing signs of fixed to mobile substitution with approximately 77% of total voice traffic originated in mobile networks.

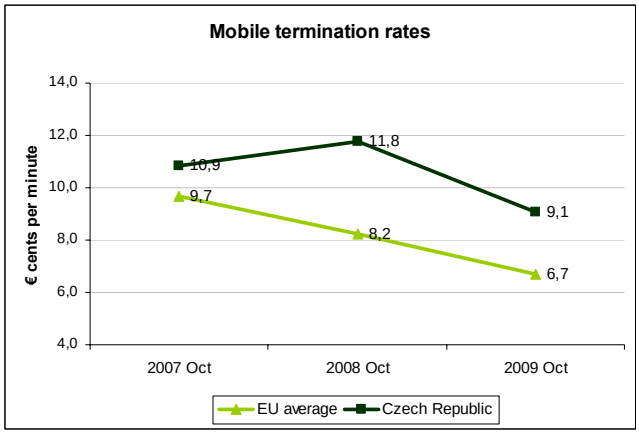
The average retail mobile price per minute at 13 eurocents corresponds to the EU average for 2008. All mobile GSM (global system for mobile communications) operators have introduced retail offers with reduced prices for less demanding consumers, and in fact, retail prices have mostly decreased or remained stable in 2009[129].

Operators note a gradual shift from pre-paid to post-paid customers – 49.1% of mobile subscribers presently opt for post-paid services (compared to 47% in 2008)[130]. Market shares of the mobile players remained relatively stable. The new mobile entrant continues to provide data and voice service over its CDMA network, albeit with limited coverage of 84% of population and 63% of territory. Its total number of subscribers is growing but the overall impact in the market is still rather insignificant. There are no mobile virtual network operators (MVNO) present; several small (simple) resellers cooperate with the GSM operators. A pent-up demand for MVNO does not appear to be an issue.

[129] Source: Telligen Report on Telecoms Price Developments from 1998 to 2009, December 2009; post-paid usage baskets (low, medium and high) using 2006 version of the OECD basket.

[130] 13 months methodology was used for assessing the number of active pre-paid subscribers in order that the 2009 data are comparable with 2008.

Regulatory issues



New glidepath for mobile termination price caps, still based on the first market review but with an updated weighted average cost of capital (WACC), is effective from January 2009. The glidepath is set on FAHC and gradually reduces the caps in 6-month intervals until 31 July 2010. The level of mobile termination rates (MTR) in the Czech Republic was at the rate of 9.09 €-cents (October 2009) nevertheless well above the EU average of 6.70 €-cents. The new price cap stemming from the glidepath applicable as of 1 January 2010 is set at 7.70 €-cents.

The mobile termination market has been reviewed in the second round and the results were notified to the Commission in August 2009. ČTÚ proposed to designate all mobile network operators as SMP (significant market power) players on their individual networks but intends to use a differentiated approach with respect to remedies. A full scope of remedies, including price regulation, is intended to be imposed on all three GSM players, while only the obligation of transparency (without the obligation to publish a reference offer) and non-discrimination was planned with respect to the new CDMA entrant. As concerns the proposed absence of an access obligation and cost orientation, it is doubtful whether imposing softer remedies on this player is appropriate.

The price regulation proposed in the draft measure was based on an FAHC model incorporating some principles of the Termination Recommendation. The cost of non-traffic-related costs, such as SIM cards, handsets, retailing, overhead, and spectrum costs are thus not included in the model. While the Commission appreciates the model's modification, it recalls the need to implement prices with a forward looking approach based on costs of an effective player. Moreover, taking into account the high level of MTR and the intention to maintain the glidepath set for the first half of 2010, a need for an earlier decrease of these rates has been noted.

Roaming Regulation

All three GSM operators present in the Czech mobile market appear to have complied with the price caps on voice, short message service (SMS) and data service as required by the Roaming Regulation. The eurotariff offered by operators reflects the maximum cap set in the Regulation. Other special roaming packages are offered to consumers with more price-competitive options. Standard retail data roaming prices are in some cases charged well above the maximum wholesale price.

Fixed

Market situation

According to ČTÚ, the fixed line penetration rate is low at 21% of population. It continues to decrease gradually, although the drop in number of fixed lines for the last year appears to be less prominent compared to the period of 2005-2008. The volume of fixed originated and

terminated minutes is continuously decreasing, and with approximately 77% of voice traffic originated in mobile networks there are signs of an advancing trend towards fixed-to-mobile substitution.[131]

The market share of fixed alternative players has decreased slightly to 37.1% by retail revenue. They continue to be most successful in providing international calls where they have maintained a relatively stable market share of 47.6% by retail revenue and 55.2% by traffic volume. A marginal 6.9% of subscribers use a provider other than the incumbent for direct access to fixed telephony. This figure is well below the EU average of 24.1%.

In 2009, the Czech fixed market experienced further consolidation. Most notably, the biggest mobile operator significantly reinforced its position in the fixed market by acquiring all residential customers of two major fixed alternative players. Its original focus on the business segment of the market has thus been widened to a residential part. Following a restructuring of retail prices, access to the incumbent's network (line rental) is no longer charged for as a separate service, instead, it is included in the retail price of one of its basic products. While the traditional public switched telephone network (PSTN) in general sustained a subscriber churn, other platforms such as VoIP experienced a subscriber gain. Voice over cable is offered by a growing number of smaller operators. However, due to the market share at 3.9% of traffic, VoIP services are yet to have a more significant impact on the market dynamics. As for the cable platform, voice services are usually taken up as a part of a bundle.

Regulatory issues

The process of the second round of market review for all remaining retail markets excluded from the new Recommendation has been finalised. These markets failed to fulfil the three-criteria tests – as a result, regulation was withdrawn by June 2009. A new analysis of the retail access market was under preparation.

As regards the wholesale fixed markets, reviews of the second round have been notified to the Commission with respect to fixed origination and termination in August 2009. A full scope of remedies, including price caps based on LRIC for geographic numbers, has been proposed for the SMP player in the wholesale fixed origination market (incumbent operator).

With respect to wholesale fixed termination, where 24 operators were proposed to be designated with SMP, the regulator proposes a differentiated scope of remedies for the incumbent and other players. While a full scope of remedies, including the obligation to provide reference interconnection offer (RIO) and the price regulation based on a bottom-up LRIC as designed for an efficient operator (along the lines set out in the Termination Rates Recommendation), was proposed with regard to the incumbent operator, the remedies intended for the other SMP players were more limited in scope and include only the obligations for non-discrimination and transparency. In this context, the NRA argued that the position of other players in the market was not sufficiently strong to allow behaviour independent of other market players and consumers. The Commission has expressed reservations to such an approach, and noted a need to impose effective access obligations as well as an obligation to charge tariffs corresponding to cost-orientation in an efficient manner, by way of a procedure which would not impose an undue procedural burden on smaller operators.

[131] The fixed and mobile outgoing traffic for 2008 was 23% and 77%, respectively.

The proposed definition of the fixed termination market covered *inter alia* the termination of mobile networks using a technical solution restricting the mobility of the terminal point, such as for example provision of a fixed connection via public branch exchange (PBX). In this way (together with a change of numbering plan), national authorities reacted to a long standing grievance of the fixed alternative operators claiming that the practise of mobile operators to use mobile numbers for this type of service unduly harms competition.

The wholesale interconnection charges have been decreased by the regulator by 5% at the first transit for the fixed origination and at the last transit for the fixed termination. Nevertheless, the fixed interconnection charges applied in the Czech Republic remain some of the highest in the EU.

Overall, as regards the impact of remedies imposed in the fixed markets, it appears that the regulation currently in place is not successful in stimulating further development towards more effective competition. Within this context, regulatory challenges are also linked to decreasing trends in fixed voice traffic.

Broadcasting

Market situation

In the TV broadcasting market, terrestrial transmission provides services as a basic means of transmission to 1.8 million households (41.2% of total households) as of July 2009. An estimated share of digital technology within the terrestrial transmission is 1.1 million of households. Satellite TV with 1.1 million (25.4%) and cable TV with 0.8 million (18.9%) of households follow[132]. Ongoing progress in transition to digital technology appears to go hand in hand with an increasing consumer interest in platforms other than the 'traditional' terrestrial transmission which has been prevailing in the broadcasting market so far.

This trend is most notable with satellite broadcasting which sustained the most significant gain in subscriber use. There are four major satellite providers established in the market. Cable market has also experienced some subscriber growth, although the cable penetration growth is less pronounced than the one for satellite. Cable part of the broadcasting market still experiences a large degree of consolidation; there have been limited investments into upgrade of technology and extension of customer offers. IPTV has expanded in subscriber numbers, nevertheless its impact in the market is still somewhat restricted (0.3 million of households, representing 6% of total households).

Regulatory issues

The process of digital switchover continues with further stages. The analogue switch-off has already been completed in two regions – Praha and Plzeň. Parallel analogue and digital broadcasting with at least one digital network has been initiated in all other regions except Zlin and Jesenik. Analogue switch-off for all main transmitters is scheduled for 11 November 2011. The remaining transmitters will switch-off analogue the first half of 2012. There are four digital terrestrial networks operating in the Czech Republic; the first network transmits public channels of the public multiplex while the other three carry commercial broadcasting.

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132 Data concerning single technological platform refers to the number of households receiving national TV programmes primarily via this platform.

As of September 2009, 83% of population is covered by at least one digital network, 60% by the first two networks and 26% by all four networks.

As regards transparency of the process, new dedicated digital switchover websites offer detailed information to citizens on developments in their regions, including practical tips and advice. Such an online service is provided by the national coordination group responsible for the information campaign, by the regulator, and by various commercial entities. Additional information is available to citizens via a national free-phone service. A progress report on digitalisation is published by ČTÚ every 6 months. The regulator also carries out the task of technical coordinating the process with national institutions and stakeholders.

Following the results of the three- criteria test performed by the regulator, remedies imposed in the wholesale broadcasting market since the end of 2006 were withdrawn by ČTÚ in August 2009.

Horizontal regulation

Spectrum management

Following making available of additional frequencies in the 900 MHz spectrum band, previously used by the Ministry of Defence, ČTÚ allocated the newly available frequencies to the three existing GSM players in June 2009. The frequencies were assigned through a tender. The purpose of the asymmetric assignments of additional frequencies was to facilitate balancing of the competitive conditions in the market, as each existing operator had been previously allocated a different amount of frequencies in this part of spectrum. According to ČTÚ, the allocations are also expected to enhance further user benefit by giving all GSM operators sufficient spectrum to enable at least a basic future provision of mobile broadband services over the 900 MHz band. The Commission is following this matter.

Public consultations were carried out on the draft amendments of the national radio spectrum utilisation plan related to frequency spectrum bands of the 900 MHz, 1800 MHz and 2.6 GHz. The modifications regarding 900 MHz and 1800 MHz spectrum bands are effective from January 2010. Public consultation was still ongoing with respect to new proposals related to 2.6 GHz band where the NRA indicated an aim of stimulating market interest in this band (currently not used). Market interest has not been noted for the latter despite previous changes to the utilisation plan for this band effective from January 2009. In 1800 MHz spectrum band, the number of rights of use was increased to four. Since there is a sufficient spectrum block available, the latter amendment creates the possibility for an entry of a new player. The tender for 1800 MHz spectrum is expected to be initiated in 2010. The Commission services are actively monitoring these processes as to compliance with the requirements of the EU regulatory framework. Spectrum trading is provided for in the legislation but has not yet been applied in practise.

In 2009, Czech Republic has been active in discussing the future use of the digital dividend. In March 2009, ČTÚ concluded the second round of the national public debate on the digital dividend by organising a second public workshop that also involved participants from the neighbouring Member States. Broad support has been given to future use of the digital dividend by new broadband networks and services. The relevant frequency channels will be released during transition to digital broadcasting. The timeframe for allocation of digital dividend spectrum is based on the Technical Transition Plan - efforts are made to create conditions for releasing the digital dividend band in 2012. A third round of the national

consultation process organised on this issue by ČTÚ is planned for 2010. In the context of the digital dividend, the Czech Republic has not yet specified any plans towards spectrum re-farming. *Implementation of spectrum decisions*

The Czech Republic has declared the implementation of the following Commission's decisions on radio spectrum harmonisation: Decisions 2005/513/EC, 2005/928/EC, 2006/771/EC, 2006/804/EC, 2007/131/EC, 2004/545/EC, 2005/50/EC, 2007/90/EC, 2007/98/EC, 2008/294/EC, 2008/411/EC, 2008/432/EC, 2008/477/EC, 2008/671/EC and 2008/673/EC. The implementation of Decision 2007/344/EC on the harmonised availability of information regarding spectrum use, which ensures accessibility of the separated radio interface specifications in the ERO Frequency Information System (EFIS) database, is under way.

Numbering

A change of the national numbering plan, indicated by ČTÚ in 2008, came into effect by a modification of the numbering plan effective from September 2009. A new number range of 61X has been reserved for converged services. At the same time, a temporary provision allows mobile numbers to be used for fixed-mobile lines where mobile networks provide a connection at a fixed location, at least until expiration of relevant customer contracts.

THE CONSUMER INTEREST

Tariff transparency and quality of service

The national rules specifying requirements for provision of transparent price information by operators and service providers are set in the legislation. The requirements set by ČTÚ with respect to quality of service include the obligation to provide *inter alia* information on supply time for a connection, fault rate per line, fault repair time, bill correctness complaints, call interruption ration for mobile networks, and other. The regulator provides a comparison of prices for different offers on its website. In addition, it gathers and publishes information on service quality with respect to individual operators. However, an interactive web-based price/quality comparison tool is not yet available in the market.

Universal service

The national regulator carries out a regular monitoring for the universal service elements which have not been designated. The conclusion on both the provision of access at a fixed location and the provision of comprehensive directories and directory enquiry services was that reinstating an official designation was not necessary. Following an official review, ČTÚ made a decision to remove the provision of complementary services for access at the fixed location, such as the phased payment for a new connection, free selective call barring and free itemised billing, from the scope of designated universal services. The elements taken out of the scope of the current designations appear to be provided by the market at a satisfactory level even without a formal designation. However, further monitoring in this regard is necessary.

The incumbent's designation for the provision of public payphones is effective until 2012. Taking into account a decreasing interest of the public in using this service, the density criteria were reduced as of July 2009. Additional criteria aiming for a further gradual reduction in 2010 were adopted in September 2009. ČTÚ carried out a new designation for

the provision of special terminal equipment in June 2009. The element of special tariffs for disabled users continues to be provided by both designated undertakings – incumbent and the smallest GSM mobile operator. Outside the universal service obligations, another mobile market player is offering special tariffs to disabled and low income recipients on a voluntary basis.

For the part of universal service where financing is covered by a fund, the net cost of the universal service provision has been set for the years until 2006. Individual contributions up to 2006 have already been determined and paid to the universal service fund. However, following the Supreme Court's decision of August 2009, granting all contributing operators a legal status of the party to the administrative proceeding on the net cost calculation, ČTÚ is to revisit the net costs calculations already finalised for the years 2001-2006 when only the designated operator was allowed to take part in the process. The new administrative proceedings are planned to be initiated at the beginning of 2010. The final determination of the net cost for 2007 is pending due to an appeal. The net cost of special tariffs, covered by the public financing has been determined and paid for the years until 2008. The Czech Republic is presently not considering an inclusion of broadband into the scope of universal service.

Number portability

The regulator adopted an amendment of the number portability rules, detailing the reduction of the time limits applied for number portability, effective from January 2009. The inter-operator procedural limits have been shortened. The mobile number should be released by the donor operator within 3 working days[133] and a maximum of 15 calendar days is set to port a fixed number form the date of sending an order to the donor operator[134]. A new amendment of the rules, effective from January 2010, further reduces the maximum time applicable to port a fixed number to 10 working days.

The asymmetric cost-oriented wholesale prices set by ČTÚ through disputes on mobile number portability remain effective. The smallest mobile operator which does not apply binding consumer contracts has expressed concerns as to the asymmetry applied. Although the wholesale prices for mobile porting are higher than the EU average, the retail cost charged to consumers is zero or a symbolic 1 CZK. The retail cost of the fixed number portability depends on the gaining operator and varies from zero (incumbent) up to the level of the wholesale price. The fixed wholesale price has been reduced to €34.0 per simple order, however, such price rate still remains one of the highest in the EU.

The take-up of number portability for mobile numbers is still somewhat limited. Number portability is available for VoIP operators, provided that their service is offered as PATS (publicly available telephony service) using geographic subscriber numbers. A draft amendment of the law proposes to extend the possibility of porting between fixed and mobile networks with respect to specific non-geographic numbers used for value-added services.

Information on tariffs when calling a ported number is provided by a voice message indication when placing a call. Such information is also available on operators' websites and via SMS. The Commission is following up the developments related to number portability.

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133 Time limit for making a mobile number available for porting is 5 hours (pre-paid) or 3 days (post-paid).

134 Time limit for making a fixed number available is 10 days.

Consumer complaints

In 2009, most of the consumer disputes involved traditionally issues related to unpaid invoices, increasing in numbers. Such private-law disputes, required to be addressed first with the regulator before the matter may proceed to court for a potential debt collection, represent a significant task for the NRA understaffed for such purposes, leading to delays in proceedings. In 2009, more than 100 000 new proposals to settle consumer disputes have been submitted to the NRA. ČTÚ reports an average workload of 3.5 administrative proceeding per day per staff member - a workload that illustrates the source of delays. Other most common complaints concern quality of service and TV signal related to digitalisation of the terrestrial transmission.

In the area of consumer complaints, ČTÚ cooperates with the Czech commercial inspection office, Antimonopoly Office and the Office for Protection of Private Data.

European emergency number 112

The single most prominent concern of the national authorities identified with respect to functioning of the single emergency number 112 in the Czech Republic remains the issue of very high percentage of hoax calls (approximately 70% of all calls). A draft amendment to the Electronic Communications Act, intended to address the problem of the high number of hoax calls received by all emergency service numbers, prepared in 2008, was submitted for adoption to the Parliament. The draft amendment introduced a mechanism for identification of hoax callers and their possible rejection by the emergency services. To balance out potential negative effects of such a blocking procedure for users, the proposal included a mechanism allowing for unblocking of user devices.

The emergency services have continued working towards improving the service for an easier and more accessible use by disabled users. Faxes to receive emergencies from these users are now available in all regional emergency centres. Incoming calls from callers using special terminal equipment is routed to one emergency centre specialized to handle these types of calls, while help can be dispatched in the same pattern as for any other call.

Citizen awareness for 112 as an EU-wide emergency number has been increasing. Respondents in the Czech Republic were the most likely to know that they can reach emergency services from anywhere in the EU by calling the single European emergency number 112 (61%), compared to 25% at EU average[135].

Harmonised numbers for harmonised services of social value (116)

The EU harmonized number 116 111, reserved for child helplines, continues to be operational. Other two EU harmonized numbers are at disposal, namely the 116 000 and 116 123 numbers.

ePrivacy

It appears that national legal framework regulating spam is in place, and the Czech Data protection Office has the authority to impose fines on spammers. Cooperation with other public authorities is based on the principle of administrative assistance. General information

[135] Eurobarometer Flash survey on the European emergency number 112 (February 2010)

about spam and phishing is available, however, more can be done in terms of information on spyware and malware. International cooperation on these issues remains rather theoretical[136]. Subscriber identification is not obligatory for pre-paid cards.

[136] Study on activities regarding spam, spyware and malware, time.lex, October 2009.

DENMARK

INTRODUCTION

The broadband penetration in Denmark is the highest among the EU countries. Mobile broadband is booming in Denmark, and also the number of fibre to the home (FTTH) connections is growing. Fixed broadband continues to grow, although at a slower rate. The demand for higher broadband speeds increased during 2009, as did the use of bundled packages. Fixed PSTN telephony continues to decrease, whereas IP telephony increased, in terms of subscriptions. The impact of the general economic downturn is seen more in the corporate market than in the residential market, with a focus on decreasing costs. There has been some further consolidation in the fixed market. Mobile penetration increased further from an already high level.

The second round of market analyses is progressing and a number of decisions were adopted during the year, one of which deregulated the market for mobile access and call origination. A new Frequency Act, which inter alia further develops existing rules on secondary trading and introduces technology neutrality, was adopted in June 2009, and entered into force on 1 January 2010, along with new secondary legislation and a revised Frequency Plan. A decision was taken in June to use the digital dividend for other purposes than broadcasting, in particular for mobile broadband. NITA issued decisions on frequency re-farming in the 900 and 1800 MHz-bands in late December 2009.

REGULATORY ENVIRONMENT

Main regulatory developments

A new Frequency Act, which inter alia expands the existing rules on secondary trading to also include trading of parts of licences, introduces a technologically neutral approach to the use of frequencies, and bans hoarding and anti-competitive behaviour, was adopted in June 2009, and entered into force on 1 January 2010, at the same time as secondary legislation and a revised Frequency Plan. Furthermore, it was decided in June 2009 that the digital dividend (the 790-862 MHz frequency band) should be used for other purposes than broadcasting, and in particular for mobile broadband.

In 2009 the Minister of Science, Technology and Innovation set up an independent Committee, the High Speed Broadband Committee, in order to make proposals on how to turn Denmark into a high speed broadband society. The recommendations, which were published in January 2010, covered a broad range of areas. The Committee inter alia recommended that in 2013 at least 80% of the Danish population should have access to 50 Mbps, and that the entire population should have access to 10 Mbps. The recommendations will, after a public hearing, enter into a political process.

Organisation of the NRA

The Danish NRA, *IT og Telestyrelsen* (NITA) was considered to execute its regulatory and monitoring tasks in a satisfactory way, with Danish legislation providing for adequate safeguards to secure NITA's independence. Earlier criticisms regarding NITA's lack of pro-activity and lack of transparency were not reiterated. However, some operators maintained

that the dispute settlement process still is too long and that the 4-month deadline is not always respected, although it was acknowledged that many cases are very complex.

Decision making

In 2008 NITA had concluded the first round of market analyses, resulting in almost all retail markets being deregulated, except for the retail market of the minimum set of leased lines. Also certain wholesale markets were deregulated, such as the wholesale market for transit services in the public telephone network provided at fixed locations. Regulation was also rolled back from the wholesale market for trunk segments of leased lines. At the end of 2007 NITA initiated the second round of market analyses. The NRA is continuing the second round of market analyses, and adopted in May a final decision on the market for wholesale physical network infrastructure access (LLU). It also made a draft decision in December 2008 regarding the market for wholesale broadband access, which was endorsed by the Commission, and in December 2009 the final decision was issued. Furthermore, NITA published draft decisions on the market for wholesale terminating segments of leased lines, and the market for minimum set of leased lines in December 2009. The annual LRIC decision for 2010 regarding fixed network products reduced the prices of LLU by 10 % and the prices of interconnection by up to 50 %. A decision regarding Mobile Termination Rates (MTRs) set out asymmetric MTRs, allowing a new entrant to charge higher MTRs until 2011. Finally, NITA declared the market for mobile access and call origination effectively competitive, thereby lifting obligations on the SMP operator. In 2009 the Telecommunications Complaint Board made 18 rulings, the majority of which (16) upheld NITA's decisions. One of NITA's decisions was annulled by the Telecommunications Complaint Board and one NITA-decision was altered.

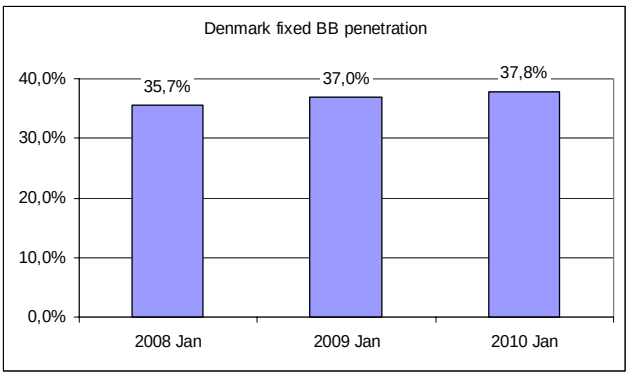
MARKET AND REGULATORY DEVELOPMENTS

The total investments in the telecommunications sector for the year 2008 reached €1293 millions, which represents an increase of 5.5% from the year before, when they amounted to €1226 millions. This represents 0.6% of the GDP. The total revenues in the telecommunications sector for the year 2008 stood at €5518 millions, whereas they reached € 5962 millions the year before. This represents 2.4 % of the GDP. However, the revenues for the year 2008 are not directly comparable with the revenues for the year 2007, due to a change in definitions. It is estimated that, if adjusted for the changes in definitions, the level of revenues for the year 2008 is similar to that for the year 2007.

Market players considered that the recession has had a higher impact on the business sector than on the residential markets, where the effects mainly are seen in a slight decrease of the number of handsets sold, rather than a decrease in call minutes. On the corporate end-user market many companies are cutting costs, by decreasing telecommunications usage, and by trying to purchase cheaper telecommunications services. Demand has also gone down in the corporate market due to lay-offs in the industry, which result in fewer company phones being issued etc. Telecommunication operators appear to be focusing on cutting costs, inter alia by lay-offs, and also focus on defensive investments, except for investments in 3G and in mobile broadband. Energy companies rolling out fibre also appear to be cutting down on investments, and concentrate on increasing the penetration rate in areas where fibre is already laid down.

Broadband

Market situation



Denmark has the highest broadband penetration rate in the EU, reaching 37.8% in January 2010, which is well above the EU average of 24.8%. Mobile broadband is increasing significantly, with a 10.7% penetration rate in January 2010. The fixed broadband market is considered close to saturation, and the number of new broadband lines still increase but at a slower rate. The number of new broadband lines per year increased by only 25 039 for the period July 2008 to July 2009, compared to the previous year (July 2007 to July 2008), when they witnessed a significant increase of 169 660. According to NITA statistics, Fibre to the Home (FTTH) lines accounted for most of the growth in fixed broadband connections, and corresponded to 5% of all broadband lines in July 2009. The number of xDSL and cable modem subscriptions remained virtually unchanged. IP telephony is increasing and traditional PSTN continues to decrease, according to NITA statistics.

Broadband speeds are increasing in Denmark. In January 2010, 715 000 subscriptions had downstream speeds of 10 Mbps or more, which correspond to 35% of the Danish broadband subscriptions. Also upstream speeds are increasing. There were 1 197 000 subscriptions with speeds between 2 Mbps and 10 Mbps. More and more Danes are using bundled packages. Around 5.5% of the Danish population were subscribers of bundled services by July 2009. According to NITA's statistics, by the end of June 2009, there were 303 000 bundled subscriptions, which is 86% more than six months previously, and around 35% of the growth in bundled subscriptions is due to triple-play subscriptions (telephony, Internet and TV), which grew from 61 000 to 110 000 subscriptions during the first six months of 2009.

The incumbent continues to be the dominating copper network and cable provider. The incumbent's overall market share (measured in broadband lines by operator) increased significantly from 57.3% in January 2009 to 63.0% in January 2010. One of the reasons for this increase could be the cumulative effect resulting from the fact that the incumbent acquired a number of smaller operators (mainly ISPs) in 2009.

The DSL platform remained the major broadband technology for broadband lines, contributing around 60% of the broadband connections in January 2010, with other technologies accounting for 40%. The incumbent continues to dominate the DSL market, with a market share of 73% in January 2010. The incumbent's DSL lines continue to grow (from 843 406 lines in July 2008 to 911 000 lines in January 2010) whereas the total number of new entrants' DSL lines fell (from 406176 in July 2008 to 340 000 in January 2010).

Energy companies continue to invest in the roll-out of Fibre to the home (FTTH) networks, and focus on delivering 100 Mbps. The number of new entrants FTTH-connections increased from 67532 in July 2008 to 116 000 in January 2010.

New entrants' total number of wholesale Local Loop Unbundled (LLU) lines fell (with fully unbundled lines decreasing from 205 100 in July 2008 to 166 437 in July 2009, and the

number of shared access lines decreasing from 61715 lines to 59380 lines, during the same period). In October 2009, the monthly average cost per full unbundled loop in Denmark (€11.34) was above the EU average, and also the monthly average cost per shared access in Denmark (€6.16) was above the EU average. The connection fee for fully unbundled loops is close to the EU average. Due to the new LRIC decision setting out prices for 2010, both the monthly average cost and the connection fee will fall.

Regulatory issues

In order to address the issue of the lack of information on the ongoing upgrading of the incumbent's copper network, the Cable Management Forum (which resumes bi-annually) was created by the incumbent, with the intention to provide alternative operators with a platform for receiving information on the incumbent's roll-out plans. However, alternative operators considered that the information received via the Cable Management Forum was not always sufficient.

As part of the second round of market analyses, NITA adopted on 1 May 2009 a decision on the market for wholesale physical network infrastructure access (LLU), which entered into force on 1 July 2009. The decision imposes a full set of remedies, and also imposes certain new obligations on the incumbent, inter alia an obligation to provide access to unbundled fibre (dark fibre) on backhaul circuits, to anyone who has the right to interconnection. The decision also includes an obligation for the incumbent to inform other companies about their plans for upgrading of the network, to allow the companies to adjust their business plans, and a requirement that the incumbent only eliminates copper-circuits after a suitable notice period to allow the companies to find alternative solutions. The general aim of all obligations is to prevent a deterioration of the competitive situation as the incumbent keeps upgrading its network. NITA's decision was upheld by the Telecommunications Complaint Board in December 2009.

In the NITA decision of 22 December 2009 on the market for wholesale broadband access, the incumbent was designated as SMP operator, and was imposed an obligation to grant access to BSA via both the copper and the cable-TV network. NITA considered that the SMP operator's control over both the copper network and large parts of the cable TV network creates a special competition problem in the broadband market. The reason was that the SMP operator was considered to have an economic incentive to upgrade only the unregulated infrastructure (i.e. the cable TV network) to the detriment of competitors. The cable TV network can provide a higher capacity than the copper network, and without regulated access, other companies are not able to offer consumers the same services as the SMP operator. The draft decision was endorsed by the Commission in its comments letter of March 2009. Since the SMP operator will incur fairly considerable costs in order to establish a wholesale product on the cable TV network, NITA considered it important to ensure that the obligation will only have effect in practice when there is a specific request for access, and when there is sufficient clarity regarding what the wholesale price will be. Therefore the access obligation will not have effect until the wholesale price of broadband via the cable TV network has been determined, and the SMP operator has implemented all necessary systems etc. The SMP operator has concerns about the access obligation, which they consider will negatively affect their possibility to provide inter alia TV.

In markets where the incumbent has been found to have SMP and a price control obligation has been imposed, NITA annually sets maximum wholesale prices based on the LRIC model. This concerns the wholesale market for fixed network access, the wholesale market for fixed

network termination, the wholesale market for physical network infrastructure access (LLU), and the wholesale market for broadband access. In the autumn of 2009, NITA made a decision, based on the LRIC-model, setting the 2010 wholesale prices for a number of products that operators purchase from the incumbent for use of the copper access network. The decision means that a number of prices have decreased, such as the prices for shared access, and the price for LLU, which fell by 10 %, from 1 January 2010. Furthermore, the price for interconnection (termination and access) with the incumbent's fixed network decreased by almost 50%.

The concerns mentioned in previous Reports, regarding the mandatory membership and payment to local cable TV associations, have been re-iterated by some operators as being a significant barrier to market entry, preventing the roll-out and adoption of fibre and other newer technologies. In order to solve this problem, NITA is heading a working group consisting of five ministries, the Danish Competition Authority, and Local Government Denmark. The working group is looking at the possibilities to change the legal rules, and is expected to finish its work in the spring of 2010. The High Speed Broadband Committee set up by the Minister for Science, Technology and Innovation in 2009 also dealt with this issue, and published its Recommendations in January 2010, recommending the elimination of the compulsory membership to local cable TV associations, in order to ensure competition and to enable consumers to freely choose broadband provider. The Commission services are also looking into the matter.

Three years ago the Danish government introduced a tax incentive, which made it possible for employers to pay for their staff's private broadband connections, to enable employees to work from home. This benefit was not taxed. However, the Danish government decided in June 2009 to introduce a multimedia tax, where any employer having supplied with IT-equipment which can also be used for private matters, will be accounted as part of a yearly income, and taxed as such. This includes employee broadband connections at home paid by the employer, which was seen as a fringe benefit. The new tax will apply both to mobile and fixed broadband, and entered into force on 1 January 2010. Many market players are negative to the introduction of this tax into an already saturated market, where it is important to keep incentives for further uptake. However, some maintained that since the consumers pay a fixed sum, independent on how many services they use, some consumers might decide to add on an extra service since they anyway pay the tax. The new tax should also be considered as part of a larger tax-reform in Denmark, from which most tax-payers will receive a reduction in taxation.

The long-drawn issue of double coverage obtained by the incumbent for its copper network infrastructure was addressed in legislation entering into force on 1 January 2009, which provided that costs were to be covered equally by the users of the infrastructure (according to a 50/50 model between the PSTN and the DSL). Despite the new legislation, operators have concerns, since apparently the incumbent is keeping the wholesale access costs fixed and gives the whole rebate to PSTN. According to alternative operators this situation has led to a preference to provide services using bitstream rather than shared access. However, according to NITA the incumbent gives the rebate in accordance with the new legislation.

NITA continues to study the possibility of a ‘margin squeeze’. A model for calculating a potential margin squeeze, which also allows for the possibility of assessing bundled products, has been created by NITA. NITA has inputted data into the model, but have not yet issued any conclusions. Operators maintain that profit margins are close to zero for lower capacities (less than 2 M/Bits).

Mobile

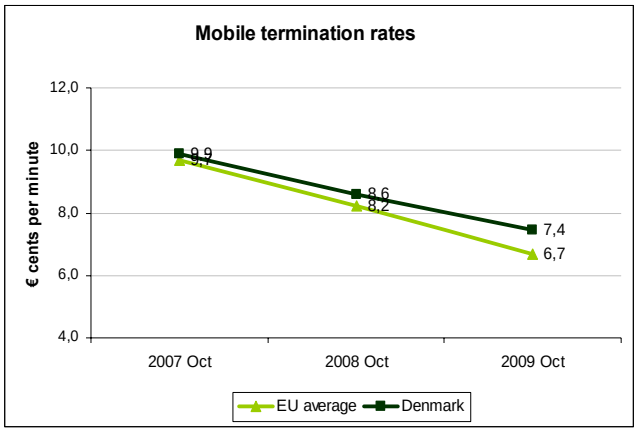
Market situation

The mobile telephony market is characterised by keen competition at the retail level. Mobile broadband is increasing significantly, according to telecommunications statistics for the first six months of 2009 published by NITA. In one year (from June 2008 to June 2009) the number of mobile broadband subscriptions which are only used for mobile data traffic doubled (from 209 000 in June 2008 to 419 000 in June 2009. Also the data traffic from these subscriptions is increasing significantly, with an increase of 160 % in the same period (from 1.3 billion MB in June 2008 to 3.5 billion MB in June 2009). However, the SMS market remains stable. During the first six months of 2009 around 6.5 billion SMS messages were sent, which is at the level of 2008.

Mobile penetration in Denmark has increased further to 126.0% in October 2009 (compared to 120.3% in 2008), thereby being above the EU average of 121.9%. There are four network operators operating their own mobile networks and offering commercial services. Three of these operators have both UMTS and GSM/DCS licence, while one operator has only a UMTS licence. Other service providers buy access to the networks of these providers. The market share of the incumbent's mobile subsidiary (including affiliated companies), in terms of subscribers, was 39.8% in October 2009, and is unchanged from the market share in October 2008. The market share of the second operator (including affiliated companies), based on subscribers, increased to 29.3% in October 2009, from 26.2% in October 2008.

The interconnection charges for call termination on mobile networks (on the basis of subscribers) decreased during the year to 7.44 €-cents, from 8.58 €-cents, but were still above the EU average of 6.70 €-cents, in October 2009. The annual average revenue per user for the year 2008 decreased to €360 (down from €389 for the year 2007). The mobile price per minute for the year 2008 fell marginally to €0.10, from €0.12 for the year 2007.

Regulatory issues



In the context of the second round of market analyses NITA made, on 30 March 2009, a decision which concluded that the wholesale market for mobile access and call origination was effectively competitive, and previous obligations on SMP operators were thereby lifted. NITA has started the second round of market analysis on the market for voice call termination on individual mobile networks. In April 2009, in the context of the market analyses, NITA carried out the market definition of the market for voice call termination on individual mobile networks, with a draft analysis in September 2009. The draft decision was made in December 2009, and the publication of the final decision is foreseen for the first quarter of 2010. In the autumn of 2009 NITA imposed asymmetric Mobile Termination Rates (MTRs) on all mobile operators, allowing the new 3G mobile provider to charge higher mobile termination rates than the other mobile network providers for the year 2010. The new entrant mobile operator is allowed to charge 0.51DKK(6.80 €-cents) whereas the other three mobile network operators can charge

0.44DKK(5.90 €-cents). All mobile termination rates will be set at a symmetric level in 2011. The Commission issued a comments-letter in the summer of 2009, pointing out that asymmetric MTRs are usually imposed for new entrants having been on the market for less than four years (which is not the case for the Danish new entrant), and then only if there are objectively justified cost differences. All mobile network operators except the new entrant are concerned about the imposition of asymmetric MTRs until 2011. Furthermore, NITA has examined the market for SMS termination, which to a great extent faces similar problems to those on the voice call termination market. A draft decision by NITA on this market is foreseen for the first half of 2010.

In 2008 discussions were held as to whether a prolongation of the maximum 6-month binding period provided for in contracts between electronic communications providers and customers would be welcome. Due to lack of support, the situation finally remained unchanged. However, many operators, and in particular mobile operators still express concerns that the binding period is too short. Throughout 2009 the binding period was contained only in a sector specific Executive Order. However, in January 2010 general consumer legislation regarding binding periods has come into force, which provides that, in general, consumer contracts now are limited to a maximum binding period of 6 months.

Roaming Regulation

As regards the recent amendments to the Roaming Regulation regarding inter alia wholesale prices for data roaming and SMS messages, the amendments were implemented on time. However, NITA has monitored the compliance of mobile operators with the amended Roaming Regulation, and found that two mobile operators did not comply with the provisions regarding prices for sending SMS messages and for receiving calls while abroad. One of the operators adjusted the relevant prices in compliance with the Roaming Regulation on 1 October 2009, while the other operator still has to carry out the necessary adjustments. Furthermore, some operators are concerned that the new cut-off clause may not be implemented before March 2010, since all mobile operators have to wait for suppliers of relevant systems.

Fixed

Market situation

There is a trend in Denmark of a decreasing number of fixed telephony subscriptions (PSTN lines) and a growing number of IP telephony subscriptions. According to statistics published by NITA, in two years the number of IP Telephony subscriptions have doubled, and at the end of June 2009 there were 603 000 IP-telephony subscriptions in Denmark. In the first six months of 2009 alone the number of IP telephony subscriptions increased by 119 000, which represents an increase of almost 25%. During the same period the number of traditional fixed telephony subscriptions fell by slightly more than 10 %.

There has been some further consolidation on the market, and during 2009 some smaller service providers (mainly ISPs) have been acquired by the incumbent. The Danish incumbent continues to be the largest provider for telephony on the fixed network and its market share has increased marginally. Its market share (for all types of calls) by minutes of traffic was 65.5% in December 2008 compared to 64% in December 2007. However, its market share, by volume, for international calls, decreased from 48.5% in December 2007, to 46.3% in December 2008. In total there were 32 fixed alternative operators, offering public voice

telephony through direct access, in July 2009. 24 of these alternative operators were using fully unbundled local loops and 8 of them were using shared access lines for the provision of their services. This represents a decrease for the former category, since 28 alternative operators used fully unbundled local loops in 2008, whereas the number of operators using shared access remained stable (8 operators). The market share, on the basis of volume of traffic, of VoIP operators increased to 15.1% in December 2008, compared to 9.4% in December 2007. 16.4% of Danish subscribers were using an alternative provider for direct access in July 2009, which is above the EU average.

The interconnection charges for terminating calls on the incumbent's fixed network at local level had increased from 0.46 €-cents to 0.48 €-cents, but were still below the EU average, in October 2009. The interconnection charges for both single and double transit remained unchanged at 0.65 €-cents and 0.86 €-cents, respectively, in October 2009, which was below the EU average. In 2010 the prices at local level will be 0.25 €-cents, due to the revision of the LRIC-model, mentioned below.

Regulatory issues

The process of revising the LRIC-model, which was initiated in the autumn of 2007 by a public consultation, was completed in 2009. LRAIC prices for 2010 and onwards have been determined on the basis of the revised model.

In 2008, NITA concluded in its analysis of the market for wholesale trunk segments of leased lines market that there was no SMP in the market, and thus, the remedies were revoked. Certain operators are now concerned about increasing prices. As regards the market for wholesale terminating segments of leased lines NITA notified a draft decision to the Commission in December 2009, with a final decision foreseen for the first quarter of 2010. Finally, market definitions have been made for the market for access to the public fixed telephone network, the market for call origination on the public fixed telephone network, and the market for call termination on individual public fixed telephone networks.

Broadcasting

Market situation

Cable is still the leading television platform in Denmark representing around 70% of all households, in July 2009. The IPTV network reached 0.8% of all households in July 2009. It should be noted that these figures are based on the results of a questionnaire survey amongst a representative cross section of the population and therefore are estimates.

Regulatory issues

Following international coordination agreements, the digital switchover in Denmark took place on 1 November 2009, without any major problems encountered. Six out of eight Danish multiplexers are allocated for digital television. Two of these six multiplexers are allocated for public service television, while the remaining four are allocated to a commercial gatekeeper.

On 4 April 2008, following a tender procedure, a gatekeeper was given a distribution license, with a licence term of 12 years, to operate the digital TV transmitter network for the four multiplexers. One of the requirements imposed was to launch mobile TV using the DVB-H standard on one of the multiplexes. The gatekeeper is facing certain resistance on the demand

side. The multiplexer to be used for mobile TV is used for testing and research until 31 October 2010.Of the remaining two multiplexers it has been politically decided that one (regarding the digital dividend) should be used for other purposes than TV, especially mobile broadband. It has still not been decided for what purpose the last multiplexer shall be used, although it is expected that a decision regarding the last multiplexer will be made in 2010.

Horizontal regulation

Spectrum management

On 12 June 2009 the Parliament adopted a new Act on Radiofrequencies, which entered into force on 1 January 2010. The new Frequency Act aims at promoting innovation and competition by increasing market players' flexibility regarding their own spectrum use. The new Act expands the existing rules on secondary trading to also include trading of parts of licences, and introduces a technologically neutral approach to the use of frequencies, as well as a ban on hoarding and on anti-competitive behaviour. New related secondary legislation also entered into force on 1 January 2010, along with a revised Frequency Plan. NITA initiated in October a public hearing over the revised frequency plan.

On 22 June 2009 it was decided by the Danish Minister of Science, Technology and innovation, and the Minister of Culture that the 790-862 MHz frequency band in the future shall be used for other purposes than TV, especially mobile broadband, to ensure that the rapid growth in the uptake of mobile broadband in Denmark will continue. The Minister of Science, Technology and Innovation will make a decision at a later stage on exactly how the frequencies will be awarded. The spectrum will be freed as of 1 January 2013. NITA is currently consulting with stakeholders as to the practical aspects of the implementation of the political decision of 22 June.

Following the adoption of the amended GSM Directive, a public consultation on the re-farming of the 900 MHz-band (which previously had been reserved for GSM) and the 1800 MHz-band was carried out in November 2009. Within the 900 MHz-band, matters are slightly complicated by the Danish railways frequencies currently located in the band. The public consultation proposed a general re-farming within the 900 MHz-band, in order to let a new entrant receive 2 X 5 MHz, by a beauty contest or by an auction, from 1 January 2011. The licence of the new entrant would run until 2017, to be renewed for 15 years until 2032, according to the public consultation. As regards existing licence holders, it was proposed in the public consultation that these licences would be prolonged until June 2017, and would then be handed out either by a beauty contest or an auction in 2017, with a licence term of 15 years until 2032. The public consultation also proposed that the licences of the current licence holders would be made technology neutral, but the technology neutrality would only enter into force eight months after the entry into force of the new entrant's licence, i.e. on 1 September 2011. On 23 December 2009 NITA issued decisions to the three existing licence holders in the 900 MHz-band, some elements of which significantly differed from the consulted draft. The decisions provided for a re-farming of the frequencies within the band, and freed 2 x 5 MHz for the benefit of a new entrant from 1 January 2011. The licence of the new entrant is expected to run until the end of 2034. It is for the Minister to decide whether the frequencies will be given out through a beauty contest (as is the case for existing licence holders) or through an auction. As regards existing licence holders, the NITA decisions provide for a termination of the licences by the end of 2019. In 2019, new licenses will be handed out either by a beauty contest or an auction, with a licence term of an expected 15 years, until the end of 2034. Thereby the licence terms of these licences will be synchronised

with the new entrant's licence terms. According to the decisions, the licences of the current licence holders will be made technology neutral in accordance with the revised GSM-directive and the Commission Decision, but the technology neutral licences may not be exploited commercially until 1 May 2011. The re-farming of the 900 MHz-band in Denmark is controversial. A complaint from an operator regarding the re-farming of the 900 MHz-band is currently being investigated by the Danish National Competition Authority (NCA). The Commission is monitoring developments regarding the re-farming of the 900 MHz-band in Denmark.

As regards the 1800 MHz-band, the solution proposed in the public consultation is quite similar to that of the 900 MHz-band. NITA also decided on 23 December 2009 on the re-farming in the band, in order to allow a new entrant to receive 2 X 10 MHz. The licence of the new entrant will run until 2032. It is not yet decided whether the frequencies will be handed out by means of an auction or a beauty contest. Existing licences have been terminated by NITA as of June 2017, and new licences will be handed out either by beauty contest or by auction. These licences, which will be valid from 2017 will also run until 2032.

In July 2009 NITA initiated a public hearing on the auction of the 2.6 GHz-band. This frequency spectrum is suitable inter alia for mobile broadband based on standards like LTE and WiMAX, but can also be used for other purposes, such as mobile TV. Frequencies in the 2.6 GHz band are to be auctioned in March/April 2010. Altogether a frequency area of 205 MHz will be auctioned, of which 190 MHz will be in the 2.6 GHz band (2500-2690 MHz) and 15 MHz in the 2 GHz-band (2010 to 2025 MHz). The licences will be service and technology neutral.

Implementation of spectrum decisions

Denmark has implemented the great majority of the Commission Decisions on frequencies. However, the Commission services are currently looking into certain aspects of the implementation of Commission Decisions 2008/411/EC (regarding the 3400 to 3600 MHz-band), which should have been implemented by 22 November 2008, and 2008/477/EC (regarding the 2500-2690 MHz band) which should have been implemented by 14 December 2008. Further information was requested from the Danish authorities and was received on 4 December 2009, and is currently being analysed.

Rights of Way and facility sharing

Mobile operators have expressed concern about difficulties in getting permits for erecting masts and antennae due to health concerns in the municipalities, and are concerned that these problems may delay the future development of mobile broadband. Furthermore, in some cases public hearings on the erection of antennae may prolong the process. NITA is taking an active role in facilitating a constructive dialogue between the mobile operators and local authorities, and in October 2009 the Minister of Science and the president of Local Government Denmark addressed a joint letter to all municipalities in Denmark to remind them of the importance of mobile broadband, and encouraging them to process the applications.

THE CONSUMER INTEREST

Tariff transparency and quality of service

There is an online interactive price and quality guide for electronic communications services on the NITA web site, which is updated by market players whenever they are launching new offers or services in the market, and then validated by NITA on a day-to-day basis. Every three months a pamphlet is issued showing the five cheapest offers for various baskets in mobile, fixed and broadband telephony, as well as fixed and mobile broadband. On the same website there is now also an online facility by which consumers can test the speed of their Internet broadband connection. However, it is considered by consumer representatives and certain market players that more transparency is needed, and that a quality index should be introduced, in order to introduce more competition on quality. Some operators allegedly advertise higher speeds than the consumer actually gets. Such advertising practice would be against the guidelines for good marketing behaviour of telecommunications providers, issued by the Consumer Ombudsman.

Universal service

A new Danish Executive Order on Universal Service was adopted on 26 June 2008, introducing a new regime for the designation of the Universal Service provider(s) in Denmark. The legislation provided for four 'packages' of services under the universal services, including (1) PSTN and ISDN; (2) leased lines: (3) directory services; (4) radio-based maritime distress and safety communications services. Some of the services (maritime services, ISDN and leased lines) are additional services not included in the scope of the Universal Service Directive. A public call for expression of interest was held regarding all four packages. The Danish incumbent was designated as the universal service provider for the PSTN and ISDN package, as well as for the leased lines package, due to the fact that they were the only operator showing interest. As regards directory services, the incumbent was also designated as the universal service provider based on a public tender, where two providers showed interest. As regards maritime services, NITA did not receive any application during the public call for expressions of interest for providing this package, and thus designated the incumbent based on an evaluation of the market and relevant operators, as well as certain technical specifications.

According to Danish legislation additional mandatory universal services, such as maritime services, ISDN, leased lines, not within the scope of the Universal Service Directive, when resulting in a net cost, are to be financed by a possible surplus of services provided within the scope of the Universal Service Directive, such as voice telephony. Based on concerns expressed by one operator, the universal service mechanism in Denmark, in particular the compensation mechanism set out in Danish legislation, is under examination by the Commission services. It is currently being investigated whether the mechanism is compatible with the Universal Service Directive, and in particular, Articles 8, 12, 13 and 32 thereof.

Users' access to the Internet and network management

Questions related to illegal downloads have been examined in Denmark, with a view to finding means to defend rights-holders' interests without putting consumers' rights at risk. No conclusions have been drawn yet, but there is a proposal from the Government to establish a legal body to send out information letters, without any sanctions, outside the Court system. If there is no improvement following the receipt of the letter, rights-holders can go to Court.

Number portability

The total number of porting transactions as regards fixed numbers were 132 404 between January 2009 and June 2009, and 280 860 as regards mobile numbers, for the same period. The average price per ported fixed number in Denmark was €7.8, and the average price per ported mobile number was €3.7 for the period between January 2009 and June 2009. The Danish Consumer Ombudsman has stated that porting of numbers should not take more than a maximum of 30 days. In view of the reform of the EU regulatory package operators maintain that it would be technically possible to port numbers in one day. However, they consider that it might be difficult to do so for legal and administrative reasons related to the notice period in contracts and the 6-month binding period (if the porting is requested during this binding period).

Consumer complaints

Consumers' complaints regarding products and services offered by the electronic communications providers are addressed to the Telecommunications Complaints Board. The number of complaints received has fallen significantly during the past years and this trend continued in 2009. Most complaints concern defective mobile phones, billing and fault repair time.

European emergency number 112

The EU rules on the emergency number 112 have been implemented in Denmark. The emergency number 112 is the only emergency number available since 1992. Caller location information is available from both fixed and mobile networks, with the push forward technology applied for the provision of caller location information to public safety points (PSAPs) as soon as a call is received.

Harmonised numbers for harmonised services of social value (116)

Both the 116 000 number, which is a hotline for missing children, and the 116 111 number, which is a child helpline, have been assigned to the incumbent, on 3 October 2007 and 16 April 2008, respectively, and are functioning. The number 116 123 is still available as NITA has not received any applications for this number.

ESTONIA

INTRODUCTION

The number of fixed broadband subscriptions continued to rise even though the relative growth rate slowed down. In addition, mobile broadband subscriptions developed fast. IPTV has been successfully introduced and demonstrated substantial growth. The mobile voice retail market continues to be characterised by growing traffic, highly competitive retail prices and innovative services, while in contrast, the fixed voice telephony market remained stable.

On the regulatory side, it seems that remedies, applied as a result of the first round of market analyses, did not effectively address competition problems in the regulated markets, in particular in the wholesale access markets. The NRA, due to its limited resources, has focused on the second round of market analyses and operators were looking forward to the implementation of the improved remedies. Both a national broadband plan and a digital dividend plan have been approved by the Government.

REGULATORY ENVIRONMENT

Main regulatory developments

The legislative framework has been relatively stable in Estonia in 2009 with some minor amendments to the Electronic Communications Act and to the State of Emergency Act concerning internal security issues.

A national broadband vision was defined by the Ministry of Economic Affairs and Communications in April to ensure future economic growth and sustain an IT leadership position in the region. According to the plans the Estonian Government and telecommunications companies plan to invest about €383 million to build a country-wide broadband network by 2015, called the EstWin project. A target has been set that by 2015 all homes and offices would be connected according to request to a network permitting connections of up to 100 Mbps.

In November the Government approved the Digital Dividend Plan developed by the Ministry of Economic Affairs and Communications. The frequencies freed up will be used for the provision of mobile broadband services and broadcasting services.

Organisation of the NRA

There have been no significant changes in the administrative landscape of the regulator since the large-scale reorganisation of regulatory authorities in the beginning of 2008. While most of the responsibilities under the regulatory framework are performed by two regulatory authorities - the Estonian Competition Authority (*Konkurentsiamet*, ECA) and the Estonian Technical Surveillance Authority (*Tehnilise Järelevalve Amet*, ETSA), it appears that the Ministry of Economic Affairs and Communications (the Ministry) is responsible for legal acts, including an approval of the National Frequency Plan and Numbering Plan. It has come to the Commission services' attention that while carrying out certain regulatory functions, at the same time the Ministry, despite the previous shift of responsibilities regarding the incumbent, is involved in activities associated with ownership and control of providers of electronic communications networks or services, in particular where a company provides inter

alia broadcasting transmission and wireless broadband. The Commission services are looking into this matter.

The financing of both regulatory authorities is based on the State Budget, and the proposal for the budget is prepared by the Ministry. However, available recourses (both human and financial) of the Estonian Competition Authority, which is responsible for economic regulatory issues of non-competitive markets, continue to be a matter of concerns, as market players again questioned whether it has sufficient resources to carry out its regulatory tasks. Moreover, a rather small operating budget limits ECA's pro-activity.

Decision-making

The ECA continued with the second round of market analyses, despite the fact that there has not been much time to monitor and evaluate the effectiveness of some first-round remedies, e.g. implementation of bitstream products. In 2009, the ECA finalised the imposition of remedies on the market for wholesale broadband access and on the market for physical network infrastructure access (LLU), but also on the market for voice call termination on individual mobile networks.

The first-round 'significant market power' decision on the wholesale mobile call termination market has been the subject of lengthy appeals, of which some are still pending in Estonian Courts.

The second round of analyses of the markets for call origination on the public telephone network provided at a fixed location and for call termination on individual public telephone networks provided at a fixed location, but also of the market for access to the public telephone network at a fixed location, is also ongoing and those markets will be shortly notified to the Commission.

There are several competition cases pending in the competition unit of the ECA, some of them launched by alternative operators already in 2008, and mainly relating to access to the incumbent's cable ducts. However, the operators doubt as to whether the process is fast and efficient enough, and that some of the issues at stake expire during the long-pending process.

The regulator’s enforcement powers, which are governed by administrative law, have not been strengthened over the year and the maximum penalty threshold continues to be at a perceptibly low level of €3 000. Moreover, it appears that the regulator has not yet been given the authority to impose wholesale line rental (WLR). This should, however, become possible in spring 2011, once the Electronic Communications Act is amended accordingly.

Monitoring of developments on the communications market is a prerequisite for ensuring that regulatory duties are carried out efficiently. However, the failure by numerous market players to provide market data, or receiving the data as confidential, prevents the NRA for carrying out well-grounded market surveys and/or their publication. Discussions were held last year between the NRA and market players, which however ended without any outcome.

MARKET AND REGULATORY DEVELOPMENTS

Turnover and investments figures have decreased compared to those of 2007. The total turnover of the electronic communications sector in Estonia was €723 million as of 31 December 2008 compared to €741 million one year before, representing a 2.4% decrease. While the revenues from fixed services have slightly increased by 3.6% compared to 2007,

amounting to about €305 million (€294 million in 2007), on the other hand the revenues for mobile services decreased by 6.3% compared to 2007, and were about €418 million (€446 million in 2007). The electronic communications sector revenues as a proportion of GDP were about 4.5%, significantly above the EU average (2.8%).

Market players state that the economic downturn has so far only had a marginal impact on the electronic communications sector, and that the decrease in revenues mainly was a result of regulatory intervention, such as the significant reduction of mobile termination rates by the end of 2007.

The total value of tangible investments remained at the same level as a year ago and was about €96 million, of which €54 million being invested by mobile operators (€46 million in 2007), €14 million by fixed alternative operators (€14 million also in 2007), and €27 million by the incumbent operator (€35 million in 2007). The ratio of investments over GDP was about 0.6%, which is above the EU average (0.4%).

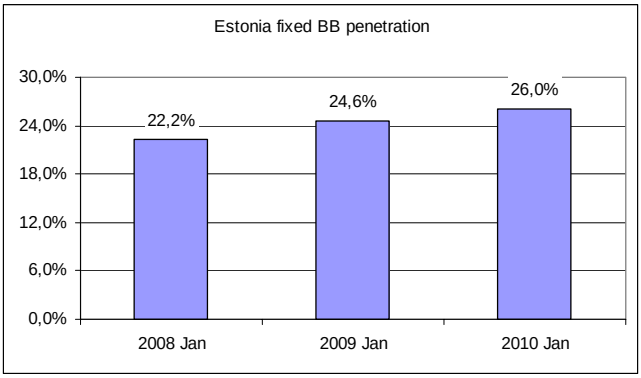
In September 2009, a public offer was made by the leading telecommunications group in the Nordic-Baltic region for all the issued shares in the holding company of the Estonian incumbent that it does not already own, and the Estonian Government therefore decided to sell its 27.17-% holding, after having agreed on the payment of an extra dividend this year and a dividend policy for the coming three years.

The regulator tried to address the level of competition by improving the remedies imposed on the market players during the first round of market analyses on access markets. Final decisions on the LLU market (the physical network infrastructure access market), and on the wholesale broadband access market were taken in September. It remains to be seen whether the new remedies improve the situation with the low take-up of wholesale broadband services by operators and access to the incumbent's local loop unbundling (LLU) products.

The Estonian Government and telecommunications companies plan to invest about €383 million to build a country-wide broadband network by 2015, called the EstWin project. The agreement on the EstWin project was signed by the Estonian Minister of Economic Affairs and Communications and representatives of the main market players on 23 April 2009. The main goal of the EstWin project is to eliminate the digital divide between cities and rural areas, to increase social cohesion, and to contribute to economic growth. A target has been set that all Estonian households and businesses would have the possibility to connect to a network, supporting 100 Mbps connections by the end of 2015. The first step of the project is the deployment of optical fibre networks in greenfield areas where this would not be commercially profitable. As a second step, the project will cover the upgrading of existing networks, to improve their quality and capacity. It was also proposed that public funding be used for areas where network upgrading would not be commercially achieved. The subsidies would consist of a State contribution, estimated at €96 million, but a contribution from EU structural funds will also be requested. The financing of the plan requires specific attention vis-à-vis competition rules, including state aids, in order to minimise potential distortion of competition and to ensure effective wholesale access for all service providers.

Broadband

Market situation



In January 2010 the broadband penetration, in terms of fixed lines per 100 inhabitants, was 26.0%, whereas it stood at 24.6% a year earlier. This places Estonia eleventh in the EU, and above the EU average (24.8%). The number of fixed broadband active lines has grown by 5.8%, from 329 436 in January 2009 to 348 404 in January 2010. Broadband competition has improved also in rural areas, mainly due to an effective uptake of fixed wireless broadband services. While the usage of mobile data services has so far been restrained by a limited geographical coverage, the operators have improved the coverage of 3.5G networks and offer advanced data services with prices comparable to fixed broadband services. Also flat-rate pricing has been introduced. However, the penetration rate for dedicated data services was still about 1.7% in January 2010, which is well below the EU average (5.2%).

The infrastructure-based competition in Estonia is quite intensive, but there have been no further developments in the market shares of different technologies over a year. Fixed broadband services are provided through a number of competing infrastructures. DSL is not a predominant technology, nevertheless its market share over the total number of broadband lines, which stood at 42.0% in January 2010, increased by 0.6 percentage points as opposed to January 2009. Growth of wireless local loops (WLL) has been slowed down after a fast growth in 2008, to 38 286 in January 2010, from 35 150 in January 2009, and WLL connections hold a market share of 11%. Cable competition continues to be strong, and its market share of 22.0% is stable compared to last year. Also the number of FTTx lines has not continued to grow so fast. The number of FTTx connections was 69 682 in January 2010, compared to 67 846 in January 2009, and the market share of fibre in January 2010 stood at 20.0%, almost like a year ago.

The incumbent's share of all fixed broadband lines has decreased, and was at the level of 52.0% in January 2010 (down from 53.0% a year ago). However, its share is remarkable in the DSL segment, standing at the level of 94.3% in January 2010, compared with the EU average of 55.8%. Fully unbundled local loops is the main wholesale access product for alternative operators in the DSL segment with 6 355 connections, which, however, represent only 4.3% of all DSL access lines. There is no uptake of shared access services. Furthermore, a number of the alternative operators' own DSL lines remained at a low level, with a market share of only 1.2% of all DSL lines. The uptake of the incumbent's bitstream products has not improved significantly and is limited with 161 connections in January 2010, while it was 83 in January 2009. It was noted by the alternative operators, that one of the reasons of low uptake of the incumbent's broadband products is a low margin for operators to provide retail broadband services based on the incumbent's access products. It remains to be seen whether the new remedies will improve the situation in the access markets. It should be noted that the prices of wholesale broadband access products of the regulated operator have decreased, e.g. the monthly average total cost per fully unbundled loop has decreased by 3.4% compared with

the price level a year ago, from €7.73 in October 2008 to €7.47 in October 2009, being amongst the lowest in the EU (the EU average is €9.75).

About 48.4% of all retail fixed broadband lines are in the range of 144 kbps and below 2 Mbps, 42.8% are in the range of 2-10 Mbps, and 8.8% of all retail fixed broadband lines are above 10 Mbps.

Regulatory issues

Access to cable ducts continued to be one of ECA's key challenges. Since August 2008 alternative operators submitted a number of complaints on this issue to the ECA, accusing the incumbent operator of discrimination. Since access to ducts was not regulated, the complaints proceeded according to general competition law. The regulator, in collaboration with operators, developed general principles, setting out under what conditions granting access is reasonable. Eleven proceedings were carried out applying those principles, and discrimination by the incumbent operator was not revealed. However, in the beginning of 2009 the incumbent started to offer a new service, which enables other operators to build their own parallel cable ducts in the protective zone of a line facility, which remains the property of the undertakings.

Nevertheless, the NRA found that general competition law was not sufficient to resolve the problems with access to cable ducts, and decided to go for sector specific regulation in the second round of market analyses. On 9 September, the ECA adopted final measures on the wholesale physical network infrastructure access market, and introduced inter alia the obligation to grant access to the cable ducts. As a new element fibre is included in the market definition. However, the remedies for fibre are less burdensome: the obligation to grant access exists only if copper is replaced with fibre, but there are no cost-orientation or non-discrimination obligations. The Commission invited ECA to supplement the access measures for fibre loops with appropriate non-discrimination and costing remedies in view of the competition problems identified in this market. Contrary to the comments made by the Commission, the obligations proposed by the NRA are in force from January 2010.

ECA notified its market analysis on the wholesale market for broadband access, which included both copper and fibre, and imposed a non-discrimination obligation, irrespective of the enabling technology. ECA excluded the application of any price control with regard to access to optical fibre lines at the DSLAM level. The Commission invited ECA to reconsider the scope of applicable obligations. However, only a few of the Commission's comments were taken into account and the obligations are in force since January 2010.

It remains to be seen whether the imposed obligations promote competition in the wholesale access markets.

Mobile

Market situation

Compared with last year the mobile market penetration decreased by some 18 percentage points to 116.1%. This decrease is caused by leaving out all SIM cards of one service provider, which uses a particular business model by selling pre-paid SIM cards abroad. This allows users to make and receive worldwide cheap roaming calls, and therefore provides a significant number of active pre-paid SIM cards (about 1 million) in use mainly outside of

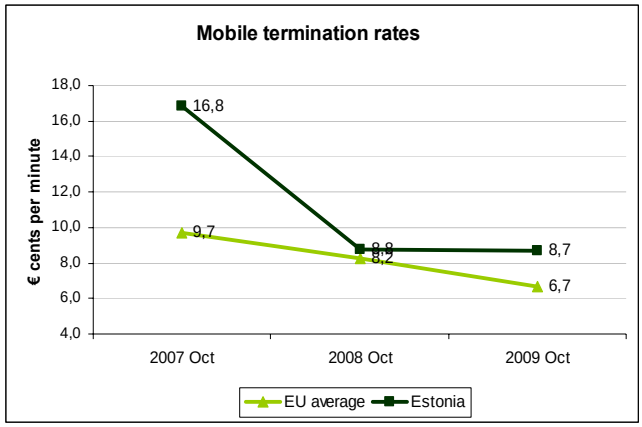
Estonia and not by Estonian end-users. Therefore these SIM cards are not taken into account in the Estonian mobile penetration rate.

The retail mobile market in Estonia continues to be characterised by highly competitive retail prices and innovative services, such as mobile-ID, mobile parking, e-ticketing. The market shares of the three largest mobile operators were approximately 47%, 29% and 24% of total number of subscriptions by the end of October 2009. While fixed calls have continued to decrease in 2008, the volume of mobile minutes and the turnover of mobile retail services continued to grow. Though the number of call minutes has risen within one year by 4%, revenues from call minutes have remained almost at the same level as one year before. Revenues from other mobile services decreased about 17% within one year, which could be explained with the significant decrease of mobile termination rates in the end of 2007.

End-user prices for mobile communications in Estonia have in general remained among the lowest in Europe. The average price-per-minute of mobile communications was €0.11 in 2008, whereas the EU average is €0.13. The annual average revenue per user in mobile networks in Estonia in 2008 was €255, which is below the EU average of €323.

The coverage of the UMTS networks, upgraded with High Speed Downlink Packet Access (HSDPA), has improved, and services continued to grow. UMTS is available in all county towns and also in several smaller cities.

Regulatory issues



There are still several pending appeals related to the first round of market analysis of the market for voice call termination on mobile networks in Court, some of them since 2006.

Final measures in the market for voice call termination on individual mobile networks, as a result of the second round analysis, were notified to the Commission in March 2009. All main market players, including for the first time also a mobile virtual network operator, were designated as having significant market power on their individual markets, and the whole set of remedies were imposed. As regards the price control remedy, ECA continued with benchmarking, and modified the mobile termination rate (MTR) in line with the change of the average MTR in European countries covered by the ERG (European Regulators Group) MTR snapshot, starting from the current level of 8.69 €-cents. However, as regards the applied downward glide-path, the modified price may not exceed an increase or a decrease of 10% per annum. ECA intends to apply this methodology, updated annually, from 1 July 2009 until 30 June 2012. In its comments letter the Commission invited ECA to implement the benchmarking in a way that instead of applying the average rate in the ERG countries together with a +/-10% cap, would use the benchmarks only of those countries which already apply MTR of an efficient operator. However, ECA argued that it did not have any official reliable and updated factual basis in this regard. As a consequence, the level of rates achieved by now on the basis of previously notified glide-paths (8.76 €-cents as from mid 2008) will remain practically unchanged at the level of 8.69 €-cents as from mid 2009

until mid 2010. This is well above the EU average, which stood at 6.70 €-cents in October 2009, and is the seventh highest in the EU.

Roaming

All mobile operators appear to have implemented the requirements set by the Roaming Regulation to a satisfactory degree. According to ECA, the price caps and billing intervals were applied in time and all operators offered the Eurotariff, which in all cases was set at almost exactly the price cap level. Retail prices for data roaming have gone down, but are still remarkably higher than the wholesale price cap set in the Regulation. While operators noted the substantial impact of the Roaming Regulation on revenues, and were concerned about the quick implementation period, they also observed lower risks regarding clients' bill shocks, and indicated a better position in price negotiations with inefficient wholesale partners. One operator noted that it applies similar transparency conditions also when roaming in non-Europe countries (e.g. informing about prices) to avoid customers' confusion.

Fixed

Market situation

The overall size of the fixed markets appears to be decreasing due to the pressure from mobile services. The distribution of voice traffic was 31% for fixed calls and 69% for mobile calls (respectively 33% and 67% in 2007). As reported by the NRA, the fixed telephone penetration has remained at the level of 28% for several years already. The total number of active operators in the fixed telephony market decreased from 16 to 13 as of July 2009, with nine alternative operators offering telephony services over its own network.

Competition in the fixed market has still not experienced any significant improvements since last year. In 2008, the incumbent's market share by all types of voice calls remained above 70%, except for international calls, with a slight decrease compared to 2007. Whereas the incumbent's market share by revenues from fixed telephony services increased notably during the year despite the decreasing market shares by calls, the market share of the two main competitors by revenues notably decreased over the year.

The digitalisation of the incumbent's fixed network is 94%. In July 2009, 30% of subscribers used alternative operators' services for national calls and 27% of subscribers used alternative operators' services for international calls (respectively 30% and 29% in July 2008). The share of telephone subscribers actually using a direct access connection of an operator other than the incumbent operator (using either its own infrastructure or a LLU-based) for fixed services, has slightly increased from 22% in July 2008 to 24% in July 2009. The number of managed VoIP operators remained the same – nine operators, with a 9% market share of fixed calls in December 2008 (7.8% one year before). Double and triple play bundled offers are widely used by subscribers (15.5% over the population) and there has been a significant increase in the use of triple play services over the year.

Cable competition is strong and voice services of cable operators' are usually taken up within bundled offers of TV and/or broadband services.

Regulatory issues

The first round of market analyses resulted in non-SMP findings on fixed retail call markets. However, it was reported already last year that likely excessive pricing might allow the incumbent operator to make undue profit in the retail market for fixed to mobile calls. Finally, in April 2009 the competition unit of the ECA launched an investigation on that issue, which resulted in a lower price level offered by the incumbent from January 2010. However, the final decision has not yet been issued by the competition division of ECA.

A Court case, initiated by one alternative operator in 2007 concerning the market for fixed wholesale call termination and what was suspended until the final decision of the Supreme Court regarding the market for mobile voice call termination, is still pending.

Until now the incumbent was required to apply interconnection prices calculated on the basis of historical costs, while alternative operators were obliged to apply asymmetrical rates based on a price cap calculated on the EU weighted average, unless a different termination rate is substantiated by underlying costs. Two out of twelve alternative network operators used the latter opportunity, and in both cases their fixed termination rates (FTR) were higher than the incumbent's. The operators, applying the FTR based on their underlying costs, have to provide the NRA with their recalculated prices for the purposes of supervision by the NRA on an annual basis. In 2009, three price supervision procedures were completed by ECA, and one is ongoing. The price for interconnection, applied by the incumbent operator, increased to 0.28 €-cents in October 2009 from 0.22 €-cents in October 2008, but is still the second lowest in the EU. With the ongoing second round of market analysis of the market for call termination on individual public telephone networks provided at a fixed location the ECA proposed to implement symmetric FTRs to all operators having SMP.

In addition to high call origination prices and low-cost packages offered by the incumbent operator on the retail market, some alternative operators, offering services using carrier selection/carrier pre-selection (CS/CPS), reported on regulatory problems, preventing them from competing on the fixed market and having caused decrease in revenues. Namely, customers, migrated by the incumbent operator from PSTN telephony services to VoIP telephony services, lose the opportunity to use CS/CPS, since the definition of the market for access to the public telephone network at a fixed location for residential and non-residential customers in the decision, issued by the NRA, limits this market to copper and wireless local loop, and cable network connections. The ongoing market analysis of the market for access to the public telephone network at a fixed location will give the NRA an opportunity to tackle this issue.

Broadcasting

Market situation

According to an EU Study carried out in January 2009, Estonia is now the sixth country in the EU where the whole territory is covered with free-to-air digital TV channels. While in total spectrum for digital TV would comprise nine multiplexers, three multiplexers were launched in key areas by the broadcast network operator, one for free-to-air digital TV channels with a 100% coverage of the population, and two others with conditional access, covering 80% of the population. A fourth licence has been issued to the fixed incumbent operator, which has not yet launched any operations, although it has reported its plans to the regulatory authority.

In view of the digital switch-over date, set for 1 July 2010 by the Estonian Broadcast Act, there is still a considerable number of households using analogue terrestrial TV - 75% of all households using terrestrial TV. As of 1 July 2009 there were 186 000 households with analogue terrestrial TV, representing 32% of the households, and 63 000 households with digital terrestrial TV, amounting to 11% of the households. The number of households, that switched over to digital terrestrial TV grew by three times over the year. At the same time the other TV platforms are also widely used. Cable TV represents 38% of the households, and satellite TV is used by 4% of the households. Both market shares are at the same level as a year ago. IPTV has also been successfully introduced by the incumbent operator, and has demonstrated substantial growth, now reaching 15.5% of all households, while its market share was 11% a year ago.

Regulatory issues

Some additional measures have been taken to promote digital television. Several information campaigns on the benefits of the digital switchover were launched. In addition to a webpage, the specific information telephone number 17101 was launched to support population to get any information about the digital switch-over.

In order to implement the Digital Dividend Plan, necessary frequency resources in the range of 470–790 MHz have to be allocated to the transmission service provider, which is currently using the 790 – 862 MHz frequency range.

Horizontal regulation

Spectrum management

The Estonian Government has decided on the allocation of the digital dividend, which will be created by the switch-off of the analogue terrestrial television network in July 2010. According to the Digital Dividend Plan frequencies freed up after the analogue switch-off in the 790 – 862 MHz frequency band will be used for the provision of mobile broadband services and for additional broadcasting services. It has also been agreed that for the use of these radio frequencies the Ministry will organise a public competition. Necessary legislation still needs to be developed, in order to implement the plan. However, there are some restrictions in the use of the 790 – 862 MHz frequency band, as this frequency is in military use in the neighbouring non-EU country.

The fourth licence in the 1800 MHz frequency band was not used by one operator, and was therefore revoked by the ETSA in January 2009. The unoccupied spectrum in 1800 MHz will be put into operation after public competition, and depending on the results of the competition the need for re-farming of this band will be considered.

Discussions between operators and the NRA about re-farming of the 900 MHz frequency band are ongoing. However, the fourth UMTS operator, who is lacking frequencies in the 900 MHz band, criticised the re-assignment plans.

The GSM Directive is transposed into Estonian legislation via the Estonian radio frequency allocation plan.

Frequency trading is currently not allowed according to the Estonian legislation.

The Estonian authorities informed the Commission of the full implementation of all Commission spectrum harmonisation decisions. However, the Commission services were in particular looking into the implementation of Commission Decisions 2008/477/EC and 2008/411/EC, and asked that further information be provided giving evidence that the implementation is in compliance with these Decisions.

THE CONSUMER INTEREST

Universal service

There have been no changes regarding the universal service obligation in Estonia. An alternative operator is the designated undertaking until 2012. The operator with the universal service obligation is designated only for provision of access to the public telephone network. Functional access to the Internet is defined as narrowband (up to 56 kbps) access. A compensation mechanism exists, but is not activated, as the universal service provider has not submitted any application for compensation.

Number portability

Both, the allocation of a number and its transfer from one communications services provider to another are conducted through the numbering management database managed by the Estonian Technical Surveillance Authority. According to the data, portability of numbers is not very widely used among the population of Estonia, and only 1.4% of the total of reserved numbers has been ported so far. There were 36 867 transactions regarding mobile number portability between January and September 2009, while there were 32 153 transactions over the same period in 2008. Despite the overall decrease of the fixed voice market, the number of transactions increased significantly from 8 586 between January and September 2008 to 22 319 over the same period in 2009, due mainly to one large corporate customer porting its numbers to another operator's network.

In Estonia the maximum time limit for porting fixed numbers in accordance with the Electronic Communications Act is 30 days, while the actual time needed to port the numbers is significantly shorter – about 12 days. Porting mobile numbers takes on average 10 days also. Estonia is one of the countries in the EU where no price is charged for number portability on both wholesale and retail level.

European emergency number 112

In 2008 the emergency number 112 received 261 648 emergency calls, where the rescue teams were sent out, which represents a 2.2% increase compared with 2007. The call handling centres guarantee that rescue teams are dispatched even in situations where one or two regional emergency centres are overloaded. In 2008, 1.8% of calls were directed to some other regional emergency centre compared to 1.1% in 2007.

Caller location information is received under a pull system in Estonia. However, according to the information available to the Commission services, caller location information may not be provided for all 112 calls, in particular for calls made by users of international roaming services and for fixed 112 calls in cases where the subscribers are not included in directory services and/or have prevented the calling line identification. The Commission services are looking into this matter.

Harmonised numbers for harmonised services of social value (116)

The numbering range beginning with '116' has been reserved for harmonised services of social value in the Estonian numbering plan. The Europe-wide children's helpline service number 116 111 is operational since 1 January 2009. The numbers 116 000 and 116 123 are available for the provision of the service, but no applications have been submitted so far.

Consumer complaints and out-of-court dispute resolution

The electronic communications sector was still the subject of a large number of complaints from users. The total number of complaints compared with previous year has risen, most of them relating to cable, digital and SAT-TV distribution services, mobile broadband services, billing and termination conditions, or quality of service problems.

The Consumer Complaints Committee is an independent institution, which operates at the Estonian Consumer Protection Board and settles disputes between consumers and companies. A complaint submitted to the Committee shall be heard at a Committee session within one month. A decision of the Committee, which has the nature of a recommendation, shall be complied with within one month. In the event of failure to comply with the recommendation of the Committee, the Consumer Protection Board has the right to file an action with a Court.

Data protection

The Data Retention Directive has been transposed into the Electronic Communications Act. While the obligations with regard to mobile and fixed telephony service providers were in force since 1 January 2008, the obligations with regard to Internet service providers entered into force on 15 March 2009.

In March 2009, the ETSA issued guidelines to ensure uniform understanding of all Internet service providers about the implementation of data retention obligation stipulated in the Electronic Communications Act.

FINLAND

INTRODUCTION

For the second consecutive year, the total turnover of the Finnish telecommunications sector decreased, by about 4.8% in 2008. The decrease in mobile revenues has been even higher, while revenues from the fixed market have increased over the year. For the first time the traditional market leader has lost its leading position in all main market segments. Following last years' trends, the Finnish market continues to be characterised by a highly innovative and competitive mobile market with increasing fixed-to-mobile substitution, not only with regard to voice but also with regard to mobile broadband services. In 2009, Finland reached the highest mobile broadband penetration in the EU. There are low mobile end-user prices with flat-rate offers in the market, promoting the consumption of services. Due to the combined effect of a strong growth in the number of mobile broadband subscriptions and the evidence of fixed-to-mobile substitution, the fixed broadband market shrunk, causing the fixed broadband penetration rate to decrease significantly compared to the last year. The traditional fixed market continues to shrink, and the prices for fixed services are relatively high in comparison with the other EU Member States, and in some cases even show a growth trend.

A significant regulatory development was the extension of the scope of the universal service to broadband connections on average 1 Mbps. Moreover, the national broadband plan envisages an upgrade of public communications networks to cover the whole country with 100 Mbps connections by 2015. For the first time a spectrum auction was organised in Finland in November 2009, which will allow a new network operator to enter the mobile communications market. Additional frequencies were allocated to the current licence holders, enabling them to start building fourth generation (4G) mobile networks.

REGULATORY ENVIRONMENT

Main regulatory developments

Several important regulatory decisions were taken over the year of 2009.

The Finnish Government has decided to extend the scope of universal service to a 1 Mbps connection. The obligation to provide with access to a reasonably priced and high-quality connection with a downstream rate of at least 1 Mbps is in force as of 1 July 2010, thus six month earlier than initially envisaged in the national Broadband Action Plan for 2009-2015, adopted by the Finnish Government in 2008.

Regarding spectrum management, the Finnish Act on Spectrum Auctions was adopted in June 2009, stipulating that the licenses for the 2500-2690 MHz band, primarily reserved for wireless broadband, will be issued at an auction. The auction was held in November and the winning bids for FDD (Frequency Division Duplex) spectrum were submitted by three existing mobile market players and for TDD (Time Division Duplex) spectrum by a new network operator in the mobile communications market.

Furthermore, additional frequencies in the 1800 MHz band have been allocated to the main mobile market players, enabling them to start building fourth generation (4G) mobile networks.

The Finnish Act on the Protection of Privacy in Electronic Communications has been amended to enable employers to examine the traffic data of employees' e-mail messages in cases of alleged breaches of business secrets.

In addition, the general competition legislation has been amended regarding the market dominance test.

Organisation of the NRA

In general, the Finnish Communications Regulatory Authority (*Viestintävirasto*, FICORA) has been attributed the appropriate legal powers to carry out its tasks of market regulation and consumer protection. There have been some organisational modifications of the NRA due to newly added responsibilities, such as tasks related to the extension of the scope of the universal service. However, the staff number has not increased. According to the market players, FICORA is considered as an efficient and impartial regulator.

The Finnish Competition Authority (FCA) continued to cooperate with FICORA on the third round of market analyses. Internal organisational developments have taken place also in the Finnish Competition Authority to improve its efficiency when carrying out its tasks.

Decision-making

FICORA continued with the third round of market analyses in the course of 2009 and notified the final measures of the physical network infrastructure access market and of the wholesale broadband access market to the Commission in April and May 2009, respectively. As regards the second review of the market for the minimum set of leased lines, the NRA removed the regulatory obligations, which were previously imposed on the SMP operators. Concerning the market for wholesale terminating segments of leased lines, FICORA has identified 31 operators as having SMP in their respective operating areas, and imposed relevant obligations on the SMP operators. The Commission did not have any comments regarding those notifications.

As regards dispute resolution, most of the disputes are solved by FICORA through unofficial negotiations with market players, which are considered as a fast and effective method. Regarding ex-ante guidance, further to the binding decisions, FICORA published guidelines for the pricing of regulated charges, such as fixed network interconnection charges, and its view on the development of mobile termination charges. FICORA has also an ex-post decision making role.

There was one formal request for dispute settlement on pricing of local loops in December 2009. Moreover, FICORA did informally negotiate with operators in some disputes.

Two separate appeals launched by two operators in June 2008 against the NRA’s decision to publish accounting separation calculations, related to the interpretation of the concept of ‘business secret’, were still pending in the Court.

The FCA's activities in the field of electronic communications related mostly to pricing issues on the wholesale access markets, nevertheless, the decision process involves lengthy proceedings and some cases were launched already in 2002. According to the Finnish legal system, if the FCA issues a decision and imposes a fine on the company (max 10% of the company's turnover of the previous year, according to the general competition law), this fine is subject to the validation by the Market Court, which may come to a different opinion and

refuse the fine. Furthermore, the Finnish Communications Market Act (CMA) enables FICORA to issue a penalty payment, which is also subject to the validation by the Market Court.

MARKET AND REGULATORY DEVELOPMENTS

According to the NRA and market players, the overall economic downturn has so far impacted only marginally the telecom operators' business, which remains mainly impacted by the applied regulation. The total turnover of the Finnish telecommunications sector was around €4.26 billion, experiencing a consecutive decrease for the second time by about 4.8% compared with 2007. The decrease in mobile revenues has been even higher, by about 9.8%, influenced by a decrease of termination rates, but also by lower roaming revenues. Even though the traditional fixed market is decreasing, revenues from fixed market increased over the year by about 16.7%. Regarding price trends in the fixed market, it is noticeable that prices for fixed services, both at a retail and a wholesale level, are relatively high in comparison with the other EU Member States, and in some cases even rose over the year in contrast to the prices for mobile services, which are amongst the lowest in the EU.

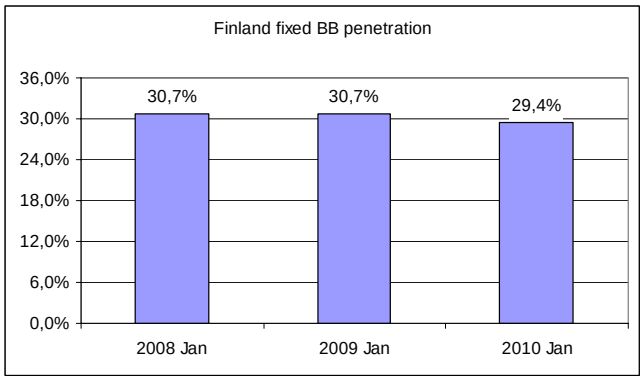
The amount of investments has been stable over the years, since operators have a solid financial standing and are able to invest. Investments in the electronic communications sector totalled €378 million, and the number has not changed significantly compared with last year. The investment over revenues ratio in the Finnish telecom sector for 2008 was 8.9%, which is higher than last year (8.4%), but is among the lowest in Europe (the EU average being 14.0%). The majority of the investments were done to develop the mobile networks to enable faster mobile broadband, which is the most rapidly developing sector, but also, to a lesser extent, to develop fibre.

The two biggest market players changed their market positions in mobile communications, and the new market leader managed to hold its leading market share in all market segments over the year. The competitive environment has been quite intense but stable in Finland, with four main market players; three of them with their own mobile, trunk and access networks, while the fourth (the association of local incumbents) operating without its own mobile network. However, a new network operator in the mobile communications markets (established by the association) participated in the 2.6GHz auction in November, and submitted a winning bid for the TDD spectrum.

At the end of 2008 the Finnish Government decided to extend the scope of universal service to broadband. In May 2009 the CMA was amended in such a way that a minimum speed Internet-connection, provided as a part of universal service, would be determined with the Regulation of Ministry of Transport and Communications. It was also settled that prior to the adoption of the regulation, FICORA is obliged to carry out a report about the situation of the data services market, in particular the connection speed used by the majority of end-users, the technical level of the market and an evaluation of the economic impact of such regulation to telecommunications operators. The Decree, issued by the Ministry in October 2009 and applicable as of 1 July 2010, provides that the minimum download speed of an Internet-connection, provided as a part of universal service, shall be 1 Mbps. However, an average minimum speed of 750 kbits, measured over a period lasting 24 hours, and an average of 500 kbits measured in any period of four hours, is deemed sufficient. The financing of the broadband services within the scope of the universal service will be decided by the Ministry, and will, if necessary, come from the State budget.

Broadband

Market situation



In general, according to the information from the NRA and market players, the Finnish fixed broadband market has matured, while the strong growth in mobile broadband subscription continued. There were 2 473 500 broadband subscriptions in Finland as of January 2010, including 1 565 500 fixed broadband connections. The latter figure has decreased by 3.7% compared to a year ago. The fixed broadband penetration in January 2010 was 29.4%, placing Finland eight in the EU. Even though the penetration rate has decreased compared with last year by 1.3 percentage points, it is still well above the EU average of 24.8%.

According to the NRA, the market shares of the four main market players in July 2009 were respectively 32%, 30%, 17% and 12%, without any recent noteworthy changes. Regarding infrastructure–based competition, DSL remains the leading technology for providing fixed broadband services, representing 75.7% of all fixed broadband connections in January 2010, despite the fact that the relative number of DSL broadband access lines continued its decline (there were 1 184 500 lines as of January 2010 as opposed to 1 240 300 a year ago). Alternative operators are keener to offer fixed broadband services using technologies other that DSL. About 28.0% from all fixed broadband connections of alternative operators and about 22.5% from all fixed broadband connections of the incumbent operators in January 2010 were provided using technologies other than DSL.

The fixed-to-mobile substitution in broadband services, mainly in residential segment, continues to be strong and mobile broadband appears to be an important means of gaining Internet access. A number of mobile broadband subscriptions, in particular mobile broadband active users accessing advanced data services via dedicated data modems/cards/keys and other active 3G equivalent advanced data users using mobile terminals, has reached 908 000, which in January 2010 increased the Finnish penetration rate of those services to 17.0% (the EU top performer), from 9.1% in January 2009. The share of other technologies, like cable modems used for fixed broadband connections was 14.2%, and wireless local loop with 31 800 connections represents a 2.0% market share of all fixed broadband services in January 2010.

The number of unbundled local loops has decreased by about 9.6% over the year; 314 000 local loops have been unbundled in January 2010 (compared to 347 400 in January 2009), while the number of shared access lines decreased from 26 800 in January 2009 to 8 200 in January 2010. The monthly average total costs per fully unbundled local loop and per shared access are continually amongst the highest in the EU, respectively €15.25 (the EU average being €9.75) and €8.46 (the EU average €3.53). Both figures have increased compared with 2008.

There have been no significant changes regarding fixed broadband speeds compared with the situation in January 2009. About 45.4% of all fixed broadband connections are provided with a download speed of between 2 and 10 Mbps, 38.6% of all fixed broadband connections are

provided with download speed less than 2 Mbps, and another 16% of subscriptions had a download speed of 10 Mbps or faster.

The Finnish Government made a resolution in December 2008 on a national plan of action to provide high-speed broadband for all citizens, which constituted 2 objectives: to define a 1 Mbps broadband connection as universal service, and to make 100 Mbps broadband network available for all citizens, according to demand, by the end of 2015. The latter objective has proceeded via 10 trial pilot projects, which have been notified to the Commission regarding state aid. However, only two of the projects mentioned above are actually launched. Relevant legislative proposals, which define the roles of different authorities and financing issues, are currently in the Parliament. According to the market players there will be no competition for these network projects without an effective and cost oriented fibre regulation in place, and public funding will only strengthen the market position of local incumbents.

Regulatory issues

FICORA notified the market review of the market for wholesale broadband access to the Commission in November 2008 and following the serious doubts expressed by the Commission concerning the partial deregulation of the market in the local operating areas of five operators, and its opening of a phase II investigation, FICORA withdrew the notification in January 2009. A revised notification was sent to the Commission in March 2009. FICORA considered defining the market as including services provided over DSL, fibre-optic, cable and wireless local loop (WLL) networks. It identified regionally distinct geographic markets consisting of the local operating areas of 31 traditional fixed operators. On the basis of the notification and the additional information provided by FICORA, the Commission made comments, and invited FICORA to revisit its approach to include cable in the market definition. It also invited FICORA to reconsider imposing a price obligation, since its absence would create a risk of access regulation being de facto annihilated if the established operators could set prices above a competitive level. However, only a few of the Commission's comments were taken into account and the final measures of this market were adopted and communicated to the Commission in May 2009.

FICORA notified the draft measures concerning the physical network infrastructure access market (LLU) to the Commission in December 2008, and defined the relevant product market as access to metallic, fibre-optic and wireless local loops for the purpose of providing broadband and data transmission services. The geographic markets were defined regionally and follow the borders of the traditional operating areas of local fixed telecommunications operators. Regarding this notification, the Commission made comments. Due to the fact that the average connection/installation charges in Finland still exceed the EU average by a considerable degree, the Commission was of the view that a clearer specification of the cost orientation and cost accounting obligations might help to reduce these charges to more efficient levels. FICORA informed the Commission that it had issued binding pricing decisions for 16 operators during the period 2005-2008, and that maximum prices for the installation of local loops were set for 15 operators. Since these measures were not notified to the Commission, the Commission reminded FICORA of its obligations under Article 7(3) of the Framework Directive, that such binding pricing decisions should have been notified to the Commission as they constitute an amendment to a remedy, and invited FICORA to communicate those final measures without further delay.

Regarding the proposed differentiation of fibre from metallic local loops in respect of the cost orientation obligation, FICORA underlined the relatively recent development of fibre-based

local loop products, which in its view justifies, at present, a differentiated regulatory approach. According to FICORA all major operators have been rolling out fibre networks to end-users with increasing speeds since 2006, but the overall number of fibre-loops is still low and investments in fibre networks are significantly above those of metallic or other types of networks. The Commission, while taking note of FICORA's commitment to monitor the development of the local loops market and amend the remedies if necessary, invited FICORA to ensure that access measures were supplemented by appropriate costing remedies, and to consider imposing similar remedies on fibre loops as proposed for copper loops. FICORA was also invited to develop remedies specifying in detail the migration process from copper to fibre loops. However, proposed obligations remained unchanged, with one exception, and the final measures of this market were adopted and communicated to the Commission in May 2009.

Mobile

Market situation

Finland is the country with a very high proportion of mobile traffic - 82.7% of the total volume of calls originated in mobile networks. The mobile penetration rate was 136.7%, up from 128.9% reported last year. About 10% of subscribers use pre-paid cards, which is the lowest rate in the EU.

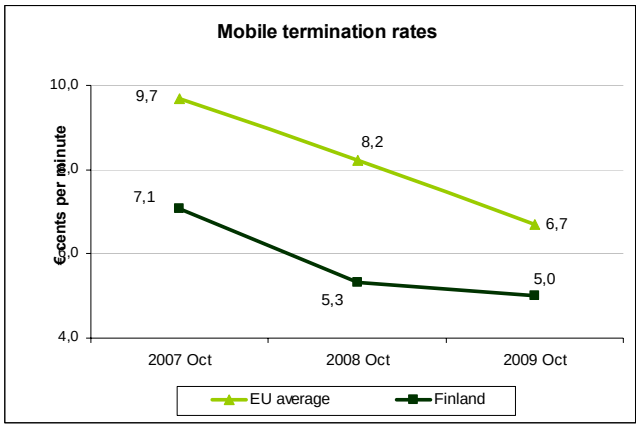
The mobile market has remained the most rapidly developing market, characterised by an increase in subscriptions and traffic volumes, mainly driven by data services, and by lower revenues, mainly due to the reduction in both wholesale and retail prices. In July 2009 the number of mobile communications subscriptions reached 7 280 000. A significant proportion of new subscriptions comprise 3G subscriptions, while, at the same time, the variety of services made available through 3G networks has also increased. Also the number of all available terminals, supporting 3G services, had increased to almost 2.5 million. That competition is strong in the mobile sector is shown by the fact that the recent market leader has lost its top position in the market. The market shares of the three mobile operators were approximately 38%, 36% and 23% of total number of subscriptions by the end of June 2009.

The mobile voice customers continue to benefit from highly competitive retail prices. The price per minute of mobile voice communications in 2008 was among the lowest in the EU at the level of €0.07 (the EU average being €0.13), and has decreased significantly since 2007 (€0.11), while the annual average revenue per user in 2008 was €314 (EU average €324). The annual growth of call minutes has been 7% and amounted to some 14.5 billion minutes, which is nearly five times more than fixed traffic volumes during the year 2008.

According to FICORA, the volume of data transferred over the mobile communications network in the first half of 2009 grew by over 70%, compared with the amount transferred in the second half of 2008, and totalled around 6,100 terabytes, which makes about 1,500 megabytes of transferred data per month per mobile broadband subscription.

Moreover, more than 1.8 billion SMS messages and about 20 million MMS messages were sent in Finland during the first half of 2009, representing an increase of 10% and 13% respectively.

Regulatory issues



The guidelines for assessing the pricing of mobile voice call termination, and the calculations on which the assessment is based, were published by FICORA in 2008, and the authority noted that these principles are still relevant and applicable. In April 2009, Finnish mobile market players reached an agreement on the level of mobile termination charges for the forthcoming period. The operators had already earlier agreed on introducing symmetric prices since December 2009, when the third mobile operator will drop its mobile termination charge from 5.4 €-cents per minute to 4.9 €-cents per minute. In addition to the symmetric price level a 10% drop of termination rates has been agreed upon to take place in 2010, when all operators will drop their prices from 4.9 €-cents per minute to 4.4 €-cents per minute.

Nevertheless, in FICORA's view, the price drop in mobile termination charges now agreed upon is not sufficient in the long run. Therefore the authority requires that by 2011 the fees should drop further. The guidelines for assessing the pricing of mobile call termination have been updated in July 2009 and of fixed call termination in August 2009.

In addition to voice call termination charges, FICORA has examined mobile termination charges for SMS traffic which are currently unregulated. Unlike for calls, termination charges for text messages in Finland are among the highest in Europe. FICORA has required that also these prices should drop, and allowed mobile network operators to carry on negotiations until June 2009. Finally, in October 2009 the Finnish mobile operators reached an agreement to lower SMS termination fees step-by-step in the course of 2010-2011 to reach a symmetrical fee for December 2011.

The Finnish legislation, which prevents the imposition of price regulation on mobile termination rates for calls, originated from fixed telephone lines without using carrier selection (CS) or carrier pre-selection (CPS) remained in place. This has led to higher retail prices for fixed-to-mobile calls not carried out via CPS or CS, and unjustifiably higher costs for fixed operators. The Commission services are looking into this matter.

The judgment of the Court of Justice (ECJ) in the case on interconnection of networks for the purpose of transmitting of text messages (SMS) and multi media messages (MMS) was issued on 12 November 2009. It concerned the application of several provisions of the EU's telecoms regulatory framework, and in particular Articles 4 and 5 of the Access Directive, in response to questions referred to the ECJ by the Supreme Administrative Court of Finland. The ECJ has confirmed that the obligation to negotiate interconnection as laid down in Article 4(1) of the Access Directive concerns only operators of public communications networks, and that this obligation applies independently of whether the company concerned has significant market power. The Court has also ruled that a national regulator may require a company, which does not have significant market power but which controls access to end-users, to negotiate in good faith with another company for either interconnection of the two networks

concerned, if the requesting company is a network operator, or interoperability of text and multi media message services if that company is a service provider.

Roaming regulation

The Finnish NRA supervises closely the compliance of mobile operators with the Roaming Regulation by collecting revenues and volume data of each MNO provider of roaming services, and follows the decrease of price ceilings and transparency issues of retail charges. According to the NRA, regulated retail and wholesale tariffs in Finland were set at almost exactly the price cap level without any package offers. As a next step, the cut-off safeguards mechanism for data services shall be introduced by 1 March 2010, and the free-of-charge receipt of a roaming voicemail message by 1 July 2010.

According to the operators the implementation of the cut-off mechanism appears problematic for technical reasons and due to the consumption habits, since Finnish consumers benefit from flat-rate prices introduced by operators. The NRA held bilateral meetings with mobile operators in early September and noted that planning and implementing is under way.

Fixed

Market situation

The usage of traditional fixed voice telephony services continues to decline with a strong substitution by mobile services [at least for residential users]. Only 17% of all voice traffic originated in fixed networks (24% in 2008). Over the year, there has been a significant decrease of fixed traffic with a 27.4% drop of call minutes. Even though there are 34 managed VoIP operators out of 38 operators actually offering publicly available telephony services, the market share of VoIP subscribers is only 3% and this figure has remained amongst the lowest in the EU.

Retail prices for fixed telephony services have reportedly shown an upward trend over the year. Local call rates rose by an average of 4%, and rates for fixed-to-mobile calls increased by almost 10%.

While three out of four main market players in Finland provide both fixed and mobile services, the fourth, an associated group of local fixed incumbents – operates only on the fixed markets, and admitted difficulties to compete in a situation where consumer demand for bundled products is increasing and when it consequently becomes more important to be able to offer a full service package including both fixed and mobile products.

The market leader has gained a 3% higher market share (up to 36% of the overall fixed telephony market), while the market share of the second operator dropped by 4% over a year (a 25% market share at the end of 2008) on the basis subscriptions The market shares of the other market players have not experienced any major changes.

In July 2009, 99% of fixed subscribers in Finland relied on the local incumbents' infrastructure for direct access, which is the highest in the EU.

Regulatory issues

Despite the imposition of a cost-orientation obligation on operators with SMP on the wholesale market for call termination on fixed networks, there is no ex-ante price control mechanism on this market. This is due to the fact that according to the Finnish Communications Market Act it is up to each operator to select the cost- accounting model it wishes to use. The regulator may check the fulfilment of the cost-orientation obligation without being able to challenge the cost accounting model chosen. Based on the data for October 2009, the termination charges of SMP operators on the wholesale market for call termination on fixed networks vary from 1.27 €-cents per minute to 2.4 €-cents per minute, with an average value of 2.27 €-cents per minute, thereby being the highest in the EU (the EU average is 0.53 €-cents per minute).

Fixed operators note that differences in the regulation of the mobile termination rates, where fixed-to-mobile interconnection prices for calls made without CS/CPS remain significantly higher than mobile-to-mobile interconnection prices, has accelerated the process of decline of the fixed market.

In November 2009 FICORA published updated guidelines for the pricing of mobile termination rates, and recommended that telecommunications operators make their pricing calculations in accordance with the principles referred to in this document.

Broadcasting

Market situation

Following the all-digital switchover in 2008, digital TV programmes are broadcasted in five national multiplexers with a varying coverage and channel offering. Two nationwide multiplexers out of five also carry radio programmes. The switchover resulted in a slight decrease in the number of TV households. About 52.4% of households receive TV broadcasting via terrestrial TV and 41% via Cable TV. The other platforms, like satellite and IPTV, are mainly supplementary platforms to cable and terrestrial TV platforms. While the share of television broadcasts received through satellite still increased over the year from 4% to 6.3%, IPTV remained marginal and its market share even decreased from 4% to 0.4%.

According to data provided by the NRA, at the end of 2008, digital set-top boxes for the reception of broadcasting via the terrestrial network, accounted for almost 60% of all digital receivers held by households. The share of integrated digital televisions of all digital receivers had grown from 14% at the end of 2007 to almost 25% a year later.

Regulatory issues

The Finnish Government has issued television network licences for multiplexers A, B and C to the broadcast network operator to ensure that the current transmission and packaging standards for distribution of television programmes will be used at least until the end of 2016. The channel coverage will improve with the new licence terms. Multiplexers A, B and C will transmit free terrestrial television channels and a majority of pay-TV channels. The network licence for multiplexes A, B and C is held by the broadcast network operator until 31 August 2010 and the new licences were issued for a period of 1 September 2010 to 31 December 2016. Moreover, in June 2009, the Finnish Government issued two operating licences for high-definition television (HDTV) to test broadcasts in antenna networks. The licences,

granted to a new entrant on the broadcasting market, are for multiplexers VHF1 and VHF2, and they are valid until the end of 2016. .

In December the Supreme Administrative Court decided to remit the case concerning the pricing of broadcasting transmission services provided by an operator with significant market power to FICORA for review. The Court asked for more a more precise reasoning as regards a cost orientation of these services.

Horizontal regulation

Spectrum management

Several important decisions have been taken regarding spectrum management in Finland.

In order to promote competition and ensure effective spectrum use, the Finnish Act on Spectrum Auctions was adopted on 18 June 2009, stipulating that the licenses for the 2500-2690 MHz band, primarily reserved for wireless broadband, will be issued at an auction. A total of 14 2 x 5 MHz bandwidth pairs for FDD -and one single 50 MHz bandwidth for TDD will be auctioned. It is settled that no more than 50 MHz can be granted to any single operator in order to prevent a monopolisation of frequencies, and to ensure that there are enough frequencies for at least four different operators. The primary principle is that the licence holder could, if desired, sell or lease the rights of use granted in the auction to a third party. This, however, would require government approval. FICORA held the spectrum auction in November 2009. The final sum amounted to €3.8 million. The winning bids for FDD spectrum were submitted by three existing mobile market players and for TDD spectrum by a new network operator in the mobile communications market.

A report of the impact of the auction will be submitted to the Parliament in autumn 2010. By then there will be information available regarding how the winners use the spectrum. The Government will later grant operating licences on the basis of the auction.

Additional frequencies in the 1800 MHz band have been assigned to the main market players in the Finnish mobile market, enabling them to start building fourth generation (4G) mobile networks. The decision makes Finland one of the first countries in Europe to allow the use of 4G LTE technology at such low frequencies. As a result, fast 4G networks can be provided with a substantially wider coverage at a lower cost than commonly used in the 2600 MHz band, which requires a considerably larger number of base stations.

A spectrum re-assignment of the 900 MHz band between existing licence-holders, following relevant legal amendment, was implemented already in 2007. While two operators appealed the spectrum re-assignment decision, the Court dismissed the appeals.

In the 450 MHz band a licence, given to the broadcasting network operator, included a condition that it can only provide wholesale transmission services. The company has an obligation to build out the network in rural and remote areas by the end of 2009. To improve the service level a third additional frequency band was allocated by the Ministry. According to the licence conditions the network coverage should be 99.9% by 2010.

Digital switch-over was completed in Finland in terrestrial television networks in August 2007 already, and a decision regarding digital dividend was taken in 2008. However, the use of this frequency band is restricted due to military use of that range by a neighbouring country. The communications policy working group was established under the Finnish-

Russian Intergovernmental Economic Commission e.g. to discuss cross-border spectrum policy issues. The coordination negotiations are ongoing, however, without invisible results so far.

Implementation of spectrum decisions

The Finnish authorities informed the Commission of the full implementation of all Commission spectrum harmonisation decisions. However, the Commission services were in particular looking into the implementation of Commission Decisions 2008/477/EC and 2008/411/EC, and asked that further information be provided giving evidence that the implementation is in compliance with these Decisions.

THE CONSUMER INTEREST

An amendment of the Communications Market Act now allows 'tie-in sales' for 3G terminals on a permanent basis since 2 April 2009, while previously it was only allowed for a fixed period. The price of mobile network terminal equipment (other than GSM) or a related item may now depend on whether the user also subscriber to a mobile service (tie-in sales).

In February 2009 FICORA published a consumer-targeted website giving advice on the secure use of electronic communications services. The site includes information and instructions on how to ensure confidentiality in communications for all Internet users, and is particularly useful for consumers who need to protect or secure confidentiality in their communications.

Universal service

Following the removal of landlines and the launch of a technology-change process by one operator in some rural areas in Finland, the regulator analysed the availability of universal service in these areas and decided in April 2009 to extend the universal service obligation to this operator additionally in 12 new municipalities, where the operator had implemented the technology change and the customers were or will be migrated to mobile technology. The operator appealed the decision to the Court and claimed that the technology change has had no effect on service availability. The operator also argued that there is no need to widen their universal service area as the Communication Market Act requires providing the service at an affordable price, and that due to the technology change the prices decreased on average by one third. The case is currently pending.

Due to the extension of the scope of universal service to a 1 Mbps connection FICORA re-analysed every Finnish municipality in order to decide whether the designation of a universal service provider is necessary or not regarding the 1 Mbps provision. The draft decisions were published for national consultation at the end of October 2009. The decision to provide a 1 Mbps connection as part of the universal service will be independent from other services within the scope of universal service. The financing of additional services within the scope of the universal service, e.g. 1 Mbps broadband connection, is planned, if justified, from the State budget. The evaluation FICORA will evaluate the need for financing.

Number portability

Mobile number portability continued to increase in 2009. There were 4 873 814 ported mobile numbers by October 2009, which represents 520 942 new ported numbers since October 2008.

However, fixed number portability is not widely used, reflecting the structure of the Finnish fixed market with a number of small local fixed incumbents operating in their traditional operating areas. By October 2009 only 30 000 fixed numbers were ported over the year, which makes cumulatively 476 000 ported fixed numbers. The charge applied between the operators for porting fixed numbers is €18.41, which is among the highest in the EU, and has even increased by 2.5% over the year.

The current statutory time for porting both mobile and fixed numbers is 5 days.

Consumer complaints

The Consumer Disputes Board (*Kuluttajariitalautakunta*) is an independent expert body representing consumers and companies and issuing recommendations concerning disputes, falling within its competence. While a binding decision can be issued by the Market Court, the authority noted that in general their recommendations are well followed by the operators (about 70% of the cases). On the other hand, the Finnish Consumer Agency (*Kuluttajavirasto*) is an enforcement authority for consumer policy. It can issue injunctions, and file actions to the Market Court. The Consumer Agency also publishes on a regular basis (nine times per year) a web-based newsletter, offering useful information for consumers, including telecom issues.

The main subject for consumer complaints concerned mobile phone services, such as problems with contracts (entering into contract, subscription, duration of contract, etc.), but also problems with functionality of additional services (e.g. billing and restrictions of access to certain numbers), pricing of data services, unintentional roaming, but also quality of service issues (e.g. network coverage). Altogether, in 2008 the Consumer Dispute Board issued 356 recommendations concerning mobile phone connections. Regarding mobile broadband services, 41 recommendations were issued in 2008. Main concerns have been with regard to functionality of services, such as speed of the connection and pricing.

European emergency number 112

The European emergency number 112 can be called from both mobile and fixed telephones, and calls are handled by the Emergency Response Centres. Caller location information is provided for all calls, upon request ('pull-system').

Finnish authorities continue with an awareness-raising ‘112 day’, which is celebrated in Finland every year on 11 February.

Harmonised numbers for harmonised services of social value (116)

The European telephone number of Child Helpline International, 116 111, is currently in operational use. The children emotional support helpline number 116 123 was assigned already in February 2008, but is not yet operational. Regarding Missing Children Helpline number 116 000, operational number is available, but no application has yet been submitted.

Must-carry

The current must-carry rules, introduced in January 2008, are subject to revision before their expiry on 31 August 2010. The Finnish authority considers to oblige the public service broadcaster as well as the major commercial broadcasters to offer additional services, such as

subtitling and subtitles-to-speech, in order to facilitate disabled people and immigrants to enjoy television broadcasts.

Data protection

The Finnish Act on the Protection of Privacy in Electronic Communications has been amended to enable employers to examine the traffic data of employees' e-mail messages in cases of alleged breaches of business secrets. Companies are also to be given legal access to traffic data to prevent or investigate unauthorised use of information society services or of communications network or service. However, reading the contents of the messages themselves is not permitted under the new law. Reportedly, so far those amendments have not yet been used by any company in Finland. Moreover, the Act provides for a wider range of measures that a telecommunications operator, value added service provider or company is allowed to take to implement information security.

FRANCE

INTRODUCTION

There was steady growth in broadband penetration in France in 2009, against the background of further consolidation in the market. The mobile market was marked by the long awaited tender for entry of a new mobile operator, which is expected to make the mobile market more dynamic. Operators continued to compete with innovative bundled offers and attractive prices. However, the incumbent has kept its overall strong position on the French market. It remains to be seen how the lower-priced services of alternative operators are taken up by the clients.

The regulatory framework for the deployment of fibre inspired to a large extent the discussions on the rollout of next generation networks in France in 2009. More detailed conditions of deployment and sharing of fibre within buildings were set out in the secondary legislation and implementation measures taken by the regulator. There was intense legislative activity expected to impact the electronic communications sector. It concerned a new tax on the electronic communications sector and the fight against online piracy. Additionally, a law combating the digital divide was approved by the Parliament.

REGULATORY ENVIRONMENT

Main regulatory developments

The French legislator has been quite active in the field of electronic communications in 2009. The Law reforming the public television system (*Loi n°2009-258 du 5 mars 2009*) adopted by the French Parliament in March 2009 introduced a new charge of 0.9% of the electronic communications operators turnover, expected to compensate for the suppression of advertising on public television.

The Law on the diffusion and protection of creation on the Internet (*Loi n° 2009-669 du 12 juin 2009 favorisant la diffusion et la protection de la création sur internet*, also referred to as "*Loi Hadopi*", being an acronym of the newly created supervisory authority) provides for a "graduated response" to alleged copyright infringements on the Internet.

The Law on the reduction of the digital divide (*Loi relative à la lutte contre la fracture numérique,* referred to as "*Loi Pintat*") was adopted in December 2009. The law provides for support to needy citizens, as well as for the development of Next Generation Access (NGA) networks in less populated rural zones. The *Caisse des dépôts et consignations* will manage (in cooperation with a committee composed of State, operators and local public authorities representatives) a public fund to co-finance very high speed broadband infrastructure in areas where such projects would not be economically viable, even if carried out jointly by several operators. At the end of 2009, the question of financing of this fund was not yet definitely decided, although €2 billion of the prepared national loan plan, referred to as the "*grand emprunt*", is to be dedicated to the deployment of NGA networks.

Organisation of the NRA

The Chairman of ARCEP (the French regulatory authority, *Autorité de Régulation des Communications Électroniques et des Postes*) who was appointed by the President of the

French Republic in December 2008, resigned from his office in April 2009 due to personal reasons and a new Chairman was appointed in May 2009 for a term of six years. According to the law, the regulator's Board has seven members nominated for six years. Their mandates are irrevocable and non-renewable, in order to guarantee their independence.

The cooperation of ARCEP with the National Competition Authority (NCA, *Autorité de la concurrence*) is viewed positively by the market players. ARCEP also cooperates with the National Frequency Agency (ANFR, *Agence nationale des fréquences*) in spectrum matters. Both the size of ARCEP's staff and its skills are also considered as satisfactory, enabling ARCEP to work proactively.

Decision-making

In 2009 ARCEP finalised the second round of market analyses of all the markets listed in the Commission's Recommendation on relevant markets, with the exception of the market for wholesale terminating segments of leased lines, for which it completed the public consultations in the autumn of 2009. ARCEP continued in its active approach and notified three regulatory measures to the Commission. These concerned the market for wholesale broadcasting transmission services of programmes in a digital terrestrial mode; the market for wholesale voice call termination on individual mobile networks in the French overseas territories; and symmetric regulation of in-building fibre optic wiring.

ARCEP took one decision in the framework of dispute resolution in 2009. Four disputes were submitted to ARCEP in 2007 and six in 2008. Regarding sanction decisions, ARCEP issued nine decisions of notice, seven of them in relation to fixed numbers portability and two in relation to 3G mobile network coverage obligations.

MARKET AND REGULATORY DEVELOPMENTS

The total electronic communications revenues in France increased notably (by 2.9% compared to the previous year) to around €49.11 billion at the end of 2008 from around €47.73 billion at the end of 2007, following the same trend as the previous year in terms of balance between revenues from the fixed and mobile sectors. At the same time, the total value of tangible investments into electronic communications networks in France has increased considerably (by 6.3% in 2008), to €6.529 billion by the end of 2008 from €6.14 billion by the end of 2007. The total investment still exceeds 10% of the revenues, which is more than in most of other sectors of the economy.

Competition intensified in 2009 regarding bundled offers combining television, broadband and fixed telephony and increasingly also mobile. As of July 2009, 22.4% of the population used bundled offers. The French Supreme Court (*Cour de cassation*) held in November 2009, with respect to the bundled offer of the biggest alternative broadband operator, that it had an obligation in the case at hand to deliver audiovisual services to its client despite the persisting technical problems with the network. This appears to put more pressure on the operators in the future, since the capacity of current networks in certain areas is challenged by the large amounts of data being transmitted.

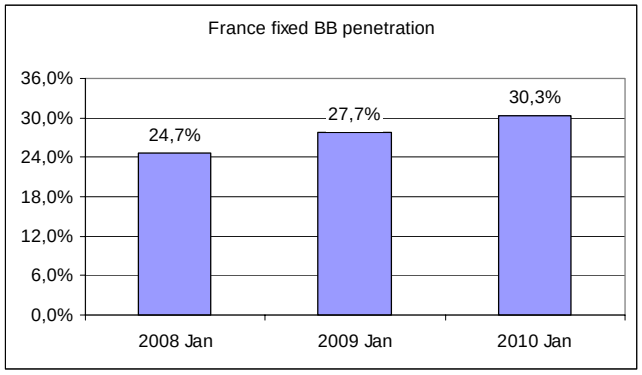
ARCEP's fibre regulation focusing primarily on the most densely populated areas is expected to unlock further deployment of NGA by operators. According to ARCEP's data, their penetration remained moderate in the second quarter of 2009 with 225 000 subscriptions to very high speed Internet, of which 175 000 with a Fibre To The Last Amplifier (FTTLA) and

50 000 with a fibre to the home (FTTH). At the same time, 4.5 million households were located in the proximity of a fibre network, while 650 000 households were located in buildings equipped with FTTH.

The Digital Plan 2012 ("*France numérique 2012*", launched by the Government in October 2008) included the objective of broadband access for 100% of the population by 2012, and announced the creation of a certificate to be used by those providers, which would ensure service (a minimum of 512 kbit/s) at an affordable price (less than €35/month) over the whole territory. The call for tenders was launched at the end of 2009 and three satellite-based products were assigned the certificates in the beginning of 2010.

Broadband

Market situation



The broadband penetration rate in France, at 30.3% in January 2010 compared to 27.7% in January 2009, is still ahead of the EU-27 average (24.8% in January 2010), thereby placing it in the sixth position in the EU. The increase in the penetration rate of approximately 2.6 percentage point was slightly above the EU average growth of 2 percentage points. France increased the total number of broadband lines to 19.5 million in January 2010, compared to 17.69 million in January 2009 (10.2% growth), which shows a slowing pace of the process, given the 12.7% growth over the year 2008.

The DSL market share decreased slightly between January 2009 and January 2010, from 95.3% to 94.9%. As of January 2010, 7.72 million lines in France were unbundled, the bulk of which were fully unbundled (6.41 million lines, compared to 5.61 million as of January 2009). LLU is now progressing more slowly, since it is concerning less populated areas with smaller switchboards.

As of January 2010, the incumbent had a 45.5% market share in broadband lines, in comparison with 54.5% for alternative operators. The consolidation of the market continued in 2009. Following the completion of the acquisition by the biggest alternative operator of one of the smaller competitors, the three main operators controlled approximately 95% of the market in 2009.

Regulatory issues

Although alternative operators request regulated access to fibre loop and bitstream access to fibre, ARCEP does not envisage any change before the deployment of fibre networks in the most densely populated areas. The incumbent proposes a commercial offer on fibre.

Furthermore, ARCEP was managing a new round of research and experiments that should help formulate precise conditions for the deployment of fibre in smaller buildings in the very densely populated areas, and in all buildings in areas other than those defined as very densely

populated. Operators indicated that they would delay their investment plans before clear rules are in place.

The consolidated French cable operator cooperated with other operators on the deployment of fibre and, thanks to its relatively robust coverage by FTTLA, was offering its network capacity to other operators. This cable operator agreed with one local authority ("*département*") on the public funding of an open passive fibre network throughout the département, in which several networks have already been developed by private initiatives. This public intervention was subject to proceedings relating to its conformity with the Community rules on State aid. The Commission concluded in October 2009 that the public funding does not constitute State aid, since it will be used for coverage of areas of the department where the deployment would otherwise not be economically viable, in order to offset the costs of provision of a service of general economic interest.

The law on the modernisation of the economy (*Loi n° 2008-776 du 4 août 2008 de modernisation de l'économie*, LME) established that local authorities can impose a new obligation on the cable operator to give access to its network in a transparent, objective and non-discriminatory manner. This option did not seem to be used much in 2009, since operators considered access to ducts of the incumbent to be sufficient at the moment.

ARCEP launched public consultation on the ways to increase the capacity of the existing copper network.

Mobile

Market situation

The French mobile market continued to be characterised by its limited dynamism. The penetration rate, standing at 90.2% as of October 2009, is still well behind the EU-27 average of 121.9%, but went up from 86.4% since October 2008. This significant gap might partly be attributed to a relatively small share of pre-paid users in the mobile market in France (35.9% of SIM cards). 2009 was marked by a sharp increase in data traffic, partly attributed by operators to use of specific types of smartphones, now being sold by all three operators. Also use of mobile Internet via dedicated data cards increases, although the penetration of mobile broadband via these tools was 3.3% as of the last quarter of 2009, which is rather low in comparison with the EU average of 5.2%. Volume of SMS sent monthly from one SIM card has increased by 80.4% in September 2009 compared to September 2008 thanks to unlimited offers by all three operators. On the other hand, revenues from voice decreased by almost 2% over the same period.[137] The mobile market overall grew by 3% in terms of revenues over the year 2008.

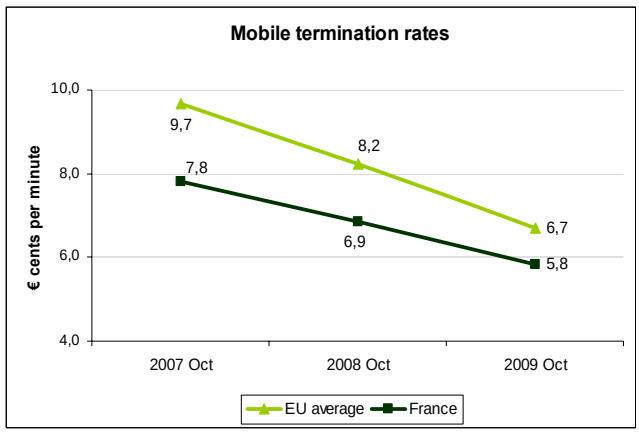
The main mobile network operator's market share further decreased by more than two points, from 43.6% to 41% (in terms of subscribers), while the second operator's share remained stable at 33.4% between October 2008 and October 2009. According to ARCEP, MVNOs had a 5.9% market share as of December 2009, compared to 5% one year earlier.

Despite their number, it appears that MVNOs have not had a significant impact on competition. MVNOs claim unfavourable wholesale data tariffs. They also regret that they

[137] According to data published by ARCEP and by the Association française des opérateurs mobiles (AFOM).

cannot manage their own home location register, which would allow for easier roaming between the networks of mobile operators.

Regulatory issues



While no regulatory action was taken, following the opinion of the National Competition Authority (NCA) of July 2008, analysing inter alia the terms and conditions imposed by network operators on MVNOs, some MVNOs reported improvements in 2009. MVNOs believe that they will have the possibility to become full MVNOs thanks to the licensing conditions of the fourth mobile operator, as well as the conditions of the envisaged licences for the 2.1 GHz frequency band, as announced in 2008 in the Digital Plan 2012. The fourth mobile operator indeed committed itself to host up to four full MVNOs on its network and to grant cost oriented prices to other mobile services providers.

Long awaited conditions for the allocation of a fourth mobile licence (2x5MHz in the 2.1 GHz frequency band, later also 2x5MHz freed in the 900 MHz frequency band) were set in July 2009 by a Government decree, upon the proposal of ARCEP. The procedure had been slowed down by the re-valorisation of the price of the licence. In December 2009, ARCEP chose the application of the only candidate for the licence, a subsidiary of an alternative operator, which is active notably on the DSL broadband market. The licence itself was granted in January 2010. At least two of the three existing French mobile operators contested the conditions of the licence before the European Commission from the standpoint of State aid rules, and two of them also before the French Conseil d'Etat, in particular concerning the price of the licence. These proceedings do not, however, have any derogatory effect. The successful candidate has inter alia committed to launch its services within two years, and to cover at least 90% of the population with its 3G network within eight years. At the same time, it will benefit from the mandatory cooperation of the existing mobile operators, regarding notably national roaming and facility sharing. The fourth mobile licence having been attributed, ARCEP is expected to publish in the first half of 2010 the conditions for two licences within the 2.1 GHz frequency band, open also to existing mobile operators.

ARCEP's decision of December 2008 on mobile termination rates (MTRs) for the period between mid-2009 and end of 2010, was contested by the incumbent and the second biggest mobile operator before the Conseil d'Etat, the French Supreme Administrative Court. The plaintiffs challenged the use of the long run incremental costs (LRIC) of a generic efficient operator (estimated at between 1 €-cent and 2 €-cents per minute in 2008) and the level of the price caps to which it led. The Conseil d'Etat confirmed in July 2009 the reference to LRIC of a generic efficient operator for MTR price control. The plaintiffs also challenged both the need for the price cap asymmetry in favour of the third mobile operator, and its level. The Court considered that the asymmetry was justified in principle, but that its level in favour of the third mobile operator for the second half of 2010 was excessive. ARCEP declared that it will set a new cap applicable to the third mobile operator for that period. Regarding the fourth mobile operator, once it becomes operational, MTR should be almost symmetric and oriented towards costs.

ARCEP issued a decision in July 2009 on the market for wholesale voice call termination on individual mobile networks in the French overseas territories for the year 2010. The Commission commented the notification with respect to the asymmetry of the voice call termination of the overseas territories operators, and to the necessity of a coherent European approach in the regulation of wholesale mobile voice call termination rates.

ARCEP issued a notice in December 2009 to the incumbent and the second largest mobile operator due to delays in their 3G coverage of the territory, fixing binding schedules to meet their respective coverage commitments. On a related note, French mobile operators have been expressing concerns regarding the opinion shift of the public, which has become wary of exposition to radio waves, and often opposes installation of new equipment, or demands substantial reduction of the power of transmitters. A working group composed of operators and experts was created in 2009, in order to research the effects of mobile networks' electromagnetic waves on human health.

Roaming Regulation

No particular problems were reported in 2009 concerning the implementation of the revised Roaming Regulation, save for the persisting issue of bill shocks that was generally related to data traffic. In most cases the retail prices were set at or very close to the maximum level indicated by the Regulation. Operators claim that the period for the technical implementation of further measures stipulated by the Regulation for 2010 is too short. According to the operators, roaming traffic decreased, which they explain by a decrease in business travels due to the global economic downturn.

An amendment to the Postal and electronic communications code extended the applicability of the Roaming Regulation to communications between Metropolitan France and its Overseas Territories.

Fixed

Market situation

The incumbent's market share remains robust. The market share of VoIP operators on fixed calls (by volume of traffic) is still high above the EU average of 14.5%, compared to 39.7% in France as of December 2008 (and 43.7% as of July 2009). The number of active operators that are actually offering publicly available telephony services decreased in 2009 to 31 from 38 as of March 2008.

Concerning the distribution of voice traffic in terms of total call volume, fixed voice traffic continued to decrease, as it represented 54% of voice traffic, while mobile voice traffic accounted for 46% as of December 2008, compared to a ratio of 55% versus 45% the previous year.

Competition slightly increased due to continuing convergence between mobile and fixed, evidenced by the entry of one of the mobile operators with an innovative quadruple play offer on the fixed market. Flat-rate offers (excluding fixed-to-mobile calls) became a standard retail product in 2009.

Regulatory issues

The association of alternative operators requested ARCEP to open sanction proceedings against the incumbent, based on the presentation of the incumbent's cost-accounting and accounting separation for the year 2006. It claimed that the incumbent overcharged the alternative operators on the market for fixed access and interconnection, as evidenced by surplus funds of around €390 million on the incumbent's published accounts relating to such markets for the year 2006. In June 2009 ARCEP decided not to pursue the proceedings. It invoked the fact that in the course of the investigations the incumbent reduced its rates, taking effect retroactively as of 1 January 2009. Furthermore, the alleged overpayment may have resulted from the fact that the incumbent is not allowed to offer bitstream access at a price that is too low, which would discourage alternative operators from investing into unbundling in less densely populated areas. ARCEP concluded that it had no power to decide retroactively on sanctions for rates that it itself approved for 2006 and 2007. Alternative operators envisage seeking compensation for the overpayments in civil Court proceedings.

Broadcasting

Market situation

The broadcasting market shows platform competition and different technical options, between terrestrial television (analogue and digital), cable, satellite and IPTV. According to the competent authority, digital terrestrial TV reinforced its position as the main platform with 42.6% of households, whereas exclusive analogue terrestrial TV has decreased to 27% of households as of July 2009 (in comparison to the ratio of 31.7% versus 29.1% as of July 2008). Cable represents about 12% of households, and the satellite figure is about 25.2%, whereas IPTV is used by about 26.7% of households (compared to 22% of households that were subscribed to a bundled offer that included IPTV as of July 2008).

Almost 44% of ADSL subscribers (i.e. 7.7 million as of June 2009) have the possibility to access TV via ADSL, which is 2.5 million more than one year before. Alternative operators offer IPTV in the unbundled zones. Outside these zones, they use the incumbent's bitstream offer, which does not enable IPTV.

Digital terrestrial TV (DTTV) continued to be deployed, and according to the National Broadcasting Regulator, (*CSA - Conseil supérieur de l'audiovisuel*) it covered 89% of the population of Metropolitan France in December 2009. According to the relevant law, national free-to-air broadcasters will have to cover 95% of the population by November 2011. Furthermore, for those *départements* where the coverage will tend to be lower than 91% of the population, CSA requested that the broadcasters ensure operation of all the sites that cover at least 500 inhabitants. Analogue terrestrial TV is planned to be switched off as of 30 November 2011. In 2009, a number of pilot switch-offs were carried out in several French towns. In July 2009, high definition DTTV covered more than 60% of the population of Metropolitan France, broadcasting five channels.

Mobile broadcasting (*télévision mobile personnelle*) has suffered from delays in 2009. In May 2008, 13 private channels were granted a licence for mobile television, together with three pre-selected public services channels. During 2009, the operators did not conclude an agreement with the content providers on how to finance the deployment of a new network. The Government and CSA continued working on solutions to boost the development of mobile television. In October 2009 TDF (*Télédiffusion de France*) proposed to finance the

deployment of the network up to coverage of 17% of population, via an ad hoc company of TDF. The other option would be the deployment of the network by a new multiplexer operator financed by the mobile operators. The final decision of relevant actors is expected in early 2010.

Regulatory issues

The Law on the Reduction of the digital divide amended the Audiovisual Law (*n° 86-2067 du 30 septembre 1986*) and established a special fund to support low-income households during the switch-over process. The conditions of this aid are specified in a decree adopted in December 2009. It should ensure a continued free reception of TV signal by households that receive only analogue terrestrial signal and are exempted from the payment of the audiovisual fee. Some on-site assistance is also envisaged for elderly and disabled citizens. Finally, inhabitants of zones where no DTTV coverage will be available will be provided with an aid in order to obtain other forms of TV reception.

In June 2009, ARCEP adopted a decision on the market for wholesale broadcasting transmission services of programmes in a digital terrestrial mode. ARCEP continues to regulate the non-replicable sites in this market.

The incumbent's fixed and mobile divisions have launched TV services, some of which being provided to their mobile and DSL subscribers on an exclusive basis. The Minister of Economy requested an opinion to be delivered by the NCA. The NCA issued in July 2009 its opinion concerning the possibility of Internet service providers to distribute TV content (such as French premier league football) exclusively. The authority stated that exclusive access must remain an exception, strictly limited in duration (one or two years) and scope, and that self-distribution (i.e. consumer access to content without a need to subscribe to Internet access from the operator) seems to balance the needs of end-users and parts of the value chain. The NCA further suggested that the regulator should set out clear rules for the exclusive distribution of TV content.

Horizontal regulation

Spectrum management

In 2009, the amendment to the GSM Directive allowed the use of the 900MHz frequency band also for systems other than GSM. In anticipation of this amendment, ARCEP had already decided in 2008 that the main mobile operators may use the 900 and 1800 MHz bands also for 3G services. In 2009, it was only the incumbent who took advantage of this possibility and deployed 3G services in the 900 MHz band in rural zones. Refarming of the 1800 MHz band has not yet started in France.

The deployment of WiMAX networks has been significantly delayed. Some WiMAX licences have changed holders through the secondary market. Public actors seem to be deploying more actively than private operators. This appears to be due to limited interest and absence of suitable equipment.

Discussions continued in 2009 on the method of attributing of the sub-band 790-862MHz in order to deploy very high speed broadband and mobile broadband on the whole territory. ARCEP launched a public consultation in March 2009. ARCEP will have to find a solution on how to divide the sub-band among a limited number of players, while avoiding creation of a

monopoly or duopoly. ARCEP plans to launch the tender procedure for the 790-862MHz sub-band jointly with the 2.6 GHz sub-band in mid-2010, following public consultation, and to grant licences by the end of 2010.

Implementation of spectrum decisions

France has generally implemented all spectrum decisions, or received respective derogations from the Commission. In October 2009, such a derogation concerned Decision 2009/381/EC on harmonisation of the radio spectrum for use by short-range devices, modifying Decision 2006/771/EC, with respect to the harmonisation of the 2400–2483.5 MHz frequency band. The derogation concerns the 2454–2483.5 MHz frequency band, on the grounds that there is a risk of interference with current military use. Consequently, France is authorised until 30 June 2012 to limit the power of data transmission systems and radio determination applications where the devices in question are used outside buildings.

A derogation has also been granted in relation to Decision 2008/477/EC on the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services, on the grounds of its current use for security purposes. France is to free the most densely populated areas already by the end of 2011, in order to limit the potential impact of the derogation on broadband coverage, and to cover at least half of the French population. The frequency band should be freed in all other areas by 31 December 2013, with the exception of Corsica, where it shall be made available by 31 May 2014.

The Commission services requested from the French authorities further information on the implementation of Decision 2008/411/EC on the harmonisation of the 3400 - 3800 MHz frequency band for terrestrial systems capable of providing electronic communications services and the abovementioned Decision 2008/477/EC.

Rights of way and facility sharing

The law on the modernisation of the economy (LME), which aimed inter alia at regulating the in-building sharing of the terminating segments of fibre networks, was implemented by several decrees in January and February 2009. Decree n° 2009-53 on the “right to fibre” specifies the right of any tenant and bona fide occupant to obtain access to a fibre network. The remaining four decrees stipulate the conditions for mandatory deployment of fibre wiring in new buildings built under building permits issued from 2010 on; outline the terms of the agreement between an operator and a building owner; impose the obligation on such an operator to inform other operators about this agreement; and impose on the operators the obligation to inform the State and decentralised public authorities ("*collectivités territoriales*"), upon request, about their infrastructures and their passive equipments. The operators consider the obligation to provide information to hundreds of decentralised authorities (and potentially up to 36 000 French municipalities) rather onerous and are also concerned by aspects such as the conservation and security of such collected information. It remains to be seen how these rules will be put into practice on a larger scale in the following years.

The provisions of the LME regarding the “right to fibre” and deployment and sharing ("*mutualisation*") of fibre in-building wiring, granted the power to ARCEP to set rules and conditions for access to in-house fibre optic lines. In December 2009, ARCEP adopted the relevant decision, together with a non-binding Recommendation on the practical implementation of the conditions of access to the very high broadband fibre network, which

aims at providing some practical and technical guidelines for the access to the in-building fibre network. The regulation is imposed symmetrically on all operators rolling out fibre lines into the homes of end-users, regardless of whether these in-building operators have significant market power (SMP). ARCEP's decision obliges them to provide access to their in-building fibre network to alternative operators. For the very densely populated areas (defined by ARCEP as being those areas where it is economically most profitable for operators to roll-out their own fibre networks into the homes), ARCEP also obliges any in-building operator to meet reasonable requests from other operators to roll-out extra, dedicated fibre lines on condition that the requesting operator is willing to co-invest. Additionally, in very densely populated areas, the in-building fibre connection point may be located within the private property limits. The decision also regulates tariff conditions and transparency of the access offers. The Commission invited ARCEP to carefully monitor the development of fibre network roll-out in France, impose other remedies on the SMP operator if the proposed symmetric regulation is not sufficient to ensure both competition and the interest of end-users, and to specify further the access pricing terms and conditions.

Administrative charges

A unanimous reaction against the new charge of 0.9% of the electronic communications operators' turnover came from the telecoms sector, claiming inter alia a risk of reduction of investment in the climate of the economic downturn and risk of passing on the cost to consumers. The French Constitutional Court decided in March 2009 that the new tax was not in breach of the French Constitution concerning the principle of equality of all tax subjects before the law. However, the tax is imposed only on authorised electronic communications operators in that capacity. In August 2009, the Commission opened a formal investigation on State aid aspects, in order to examine whether the funding mechanism for the French national broadcaster as from 2010 complies with the State aid rules. In addition, the market players question the compatibility of the tax with Article 12 the Authorisation Directive, which provides that administrative charges should only cover the administrative costs for management, control and enforcement of the authorisations. Certain French operators decided to contest the tax in national administrative proceedings. The Commission services opened an infringement case on this matter in January 2010.

THE CONSUMER INTEREST

Tariff transparency and quality of service

In June 2009 the Ministry of Economy, Industry and Employment issued a decree on pricing information for calls to value added services. The customers have to be informed when the price of the call exceeds the price of a regular communication. This tariff information has to be provided through a free message lasting at least 10 seconds in the beginning of the call, and the increased tariff can apply only once the message is over. The decree entered into force on 1 January 2010 for the calls for which the price per minute from a fixed line exceeds €0.15, and will enter into force on 1 January 2011 for all other calls to the designated numbers. Furthermore, mobile operators agreed that calls to 0800 and 0810 numbers should be included in the mobile subscriptions from January 2010.

An association of French consumers envisages taking measures against the short validity period of pre-paid mobile cards in France, and the early expiry of the recharge period. This association also criticised the practice of certain operators which sell 3G data products to offer a speed that is in reality much lower than declared. The operators allegedly often fail to

inform their clients that the promised speed cannot be delivered due to technical constraints of the network.

Regarding tariff transparency of mobile services, the French National Consumer Council, in cooperation with the operators, prepared informative sheets that should facilitate the comparison of various offers of different operators. However, according to some mobile users, these sheets are difficult to find on the websites of particular operators.

ARCEP started reflections on the neutrality of the Internet, based on the principle of non-discrimination against different content providers and transparency in relation to consumers, taking into account technical and economical aspects. ARCEP intends to initiate public debate in the spring of 2010, while it expects to issue the first guidelines in mid-2010.

Universal service

Following the judgment of the European Court of Justice on the French universal service designation mechanism in June 2008, and the respective amendment of French legislation, the participation in the designation mechanism is now open also to operators that are not able to cover the whole of the national territory. Following the calls for tenders for designating universal service providers, the Ministry of Economy, Industry and Employment adopted three decrees in November 2009, whereby it designated for the period of two years the incumbent as the provider of public pay phones and another company as the provider of directory enquiry services and of directories.

The designation of the incumbent as the provider of fixed access at a fixed location expired in March 2009, but the incumbent continued the provision of universal service at the request of the Ministry of Economy, Industry and Employment. Following the calls for tenders, in December 2009 the Ministry designated the incumbent as the provider for a period of three years. There have been discussions notably with the mobile operators regarding social tariffs for people with low income, to be offered on a voluntary basis. Alternative operators advocated an idea to include bundled offers in the universal service. Relevant public authorities are examining this issue.

An association of French operators launched a pilot center for the relay of calls for deaf persons. Client services of operators will in the future be in charge of this additional service, which should be co-financed by the public sector.

Users' access to the Internet and network management

The long discussed provisions of Law on the diffusion and protection of creation on the Internet (the Hadopi Law) entered into force in November 2009. Under the original draft law, following two successive warnings to Internet users in cases of copyright infringement, Hadopi was intended to have the power to order Internet providers to temporarily suspend the Internet access of subscribers who illegally downloaded copyright protected content, subject to certain conditions. The French Constitutional Court concluded in June 2009 that the sanction powers conferred on the new administrative authority could lead to a restriction on a person's freedom of expression. Since such ultimate sanction powers should only reside with a judge, the provisions concerning the suspension of Internet access were annulled, while the law as such entered into force in June 2009. A new law, adopted in September 2009 by the Parliament (*Loi n° 2009-1311 du 28 octobre 2009 relative à la protection pénale de la propriété littéraire et artistique sur internet,* or "*Loi Hadopi 2*"), subsequently introduced a

suspension of the connection as a sanction for offences related to certain intellectual property infringements, to be judged by a single judge, potentially in simplified proceedings. The Constitutional Court ruled on Hadopi 2 on 22 October 2009, finding the law now to be in line with the Constitution, with the exception of one provision concerning the possibility to seek civil law damages by the same penal decision of the Court.

Number portability

The average time for porting a fixed number was four days, and seven days for mobile numbers, as of October 2009, which is below the EU-27 average for fixed porting and above the EU-27 average for mobile porting. Porting is free for residential consumers; corporate clients usually pay, given the costs induced by a quantity of numbers that they port at once. Wholesale price of porting is €7.53 for fixed numbers, whereas porting of mobile numbers is free.

The total accumulated volume of ported mobile numbers, 4 410 500 in Metropolitan France (overseas excluded) as of October 2009, represented 7.6% of the mobile numbers. Mobile number portability seems to work quite well, following the launch of the one-stop-shop system in 2007. There were 1 663 600 movements during twelve months before October 2009, in comparison to 1 256 300 movements during the previous twelve months.

The volume of ported fixed numbers decreased and reached 2 571 600 during twelve months before October 2009, compared to 4 373 000 during the previous twelve months. The manual system has worked well so far only in the direction from the incumbent to an alternative operator, and ARCEP addressed a formal notice to all fixed operators in April 2009 demanding them to improve the system. An association of operators developed a new database for a direct exchange of information between the operators, based on ARCEP's decision of July 2009, which was approved by the Ministry of Economy, Industry and Employment in October 2009. The operation of the database of ported numbers was expected to be launched in the beginning of 2010 and will be financed by the participating operators. Interruption of service for the consumer shall be as short as possible, limited to the maximum of six hours from 2011 and to four hours from 2012.

On a related issue, the Law on the Reduction of the digital divide adopted in December 2009 introduced a tool that aims to facilitate the migration between Internet providers. The providers will have to offer their customers who decide to change provider the possibility to continue using their former e-mail address during six months following the termination of their contract.

Consumer complaints

The number of consumer complaints tended to decline in 2009. This may be thanks to 2008 legislation ("*loi Chatel*"), with specific provisions on issues that are the object of frequent complaints by users. The operators have in general abided by the new law, although due to the activity of a consumer association one operator was fined and another one was brought before the Court for the non-respect of the consumer protection rules in 2009. Furthermore, voluntary undertakings were adopted in 2009 by one association of operators, in order to improve transparency and consumer protection, notably regarding the procedure for fixed number porting or for dealing with users suffering an unsolicited change of operator. A consumer association continues to point to undesirable practices of certain operators, such as

continuing billing after the termination of contract or the persistent low flexibility of contracts.

The sector of electronic communications has traditionally been subject to a large number of complaints from users regarding quality of service and contractual relations. The relevant Directorate of the Ministry of Economy, Industry and Employment received 35 000 complaints in 2007, but declared that in 2008 this figure decreased by 26%, probably due to entry into force of the law on consumer protection. The relevant unit of ARCEP received 8 000 complaints in 2008, which was less than in 2007 (10 000). The role of the Mediator of electronic communications is perceived as positive. He dealt with 13 052 submissions as at 30 September 2009 in comparison to 20 000 submissions for 2008, with an average response time of two months. Mobile operators also introduced a telephone number for reporting SMS spam, which received 36 600 notifications as of 30 September 2009. It appears that this number would attract more messages if the notification SMS was free of charge.

European emergency number 112

While a major part of emergency calls appears to be still made to the traditional numbers 15, 17 and 18, some shortcomings have been reported in 2009 regarding the operation of 112. There seem to be issues with the location of the caller in a manual push mode, the precision of the location for mobile calls and the call handling by the Public Safety Answering Points. According to the French authorities, VoIP operators providing Publicly Available Telephone Services (PATS) meet the requirement to ensure that their users can access 112 as well, but there is a question of location of callers from portable computers using a mobile data connection. An association of operators is examining the possibility of an overall improvement of the situation. The Commission is closely following the issue.

Furthermore, only 27% of French respondents knew that that they can reach emergency services from anywhere in the EU by calling 112, and a relatively high percentage (15%) answered a wrong number.[138]

Harmonised numbers for harmonised services of social value (116)

Regarding numbers based on 116, the number 116000 has been assigned in France to the service for missing children and is now operational. The assignment of the number 116111 to a helpline for children to call for assistance was subject to examination in 2009.

Must-carry

The French legislation in force imposes on operators of electronic communications a must-carry obligation in relation to local public channels which provide information on local life, and which submit a request to be carried. This obligation must be fulfilled for free, and is supposed to cover also DSL and cable distribution, but not satellites. The cable operators consider this situation as discriminatory and also criticise the obligation imposed in 2009 to bear the costs of transmission of signal between the place of edition of the channel and their network.

[138] Eurobarometer Flash survey on the European emergency number 112 (February 2010).

ePrivacy

The Law on the diffusion and protection of creation on the Internet empowered agents of the newly created supervisory authority to obtain from electronic communications operators information relating to the traffic on their networks, in particular personal data such as IP addresses of the clients whose Internet connection was used for unauthorised diffusion of copyright protected content. This raised concerns among Internet users but was declared constitutional by the Constitutional Court. The impact of the new law may become visible in 2010 when the new anti-piracy authority Hadopi becomes operational.

GERMANY

INTRODUCTION

While fixed and mobile broadband penetration rates continued to increase during 2009, the growth rate for mobile subscriptions has slowed as this market reaches maturity. The incumbent, together with the largest alternative fixed-line competitor, gained the largest share of new fixed broadband customers. Cable broadband connections have continued to grow, driven by consumer demand for broadband services bundled with TV subscriptions. The incumbent continued to expand its VDSL infrastructure and diversified its VDSL-based portfolio of services by offering double-play retail offers alongside triple-play premium services. Investment in fibre-to-the-building networks has continued.

The new German Government, which came into office in September 2009, has placed increased emphasis on ensuring ubiquitous broadband coverage in Germany. The national regulatory authority (NRA), the Bundesnetzagentur (BNetzA), has set out principles for the regulation of next generation access (NGA) networks however, in practice, the regulatory response to NGA developments remains slow and reactive. The BNetzA appears to be very reluctant to intervene in the evolving NGA market in anticipation of new technologies stimulating infrastructure-based competition. Reliance on commercial negotiations between the incumbent and competitors can lead to unresolved disputes and consequently long delays before obligations are ultimately enforced thus reducing market impact.

A spectrum auction comprising frequency resources of 360 MHz in total is in the final phase of preparation and is expected to take place in the second quarter of 2010. The NRA has also decided on rules for flexible use of the 900 MHz frequency band, which is currently used for GSM services.

The European Court of Justice delivered its judgement on the infringement case against Germany regarding the amendment of the German Telecommunications Act from February 2007 on the principles of regulatory treatment of 'new markets' (C-424/07). The Court confirmed the Commission's position that national legislation may not exempt next-generation ('new') electronic communication markets from regulation or limit the discretionary powers of the NRA in its exclusive right to assess whether markets should be regulated or not.

REGULATORY ENVIRONMENT

Main regulatory developments

In February 2009, the German Government adopted a broadband strategy which aims to ensure broadband coverage for all German households at speeds of at least 1 Mbps by the end of 2010. As a second step, this strategy aims to make advanced broadband connections at speeds of at least 50 Mbps available to at least 75% of German households by 2014.

Since the end of 2008 the incumbent has been in negotiations with some fixed-line competitors, energy utility companies and fibre-based regional network operators, on the joint deployment and/or operation of VDSL infrastructure. The first of such commercial agreements on VDSL bitstream were signed in July 2009. One of the largest fixed-line competitors requested the BNetzA to impose on the incumbent the same regulatory conditions

for wholesale VDSL products as for other DSL products because of their alleged substitutability as double-play only products.

In order to facilitate competitors to deploy their own VDSL infrastructure the BNetzA imposed in 2007 a general obligation on the incumbent to grant access to its street cabinets ("Multifunktionsgehäuse") and ducts or to its dark fibre. However, it was only in December 2009, following requests by competitors submitted in August 2009, that the NRA issued the first ruling to finally provide the applicants with the access rights contained in the original general obligation. However, the prices for access are still subject to separate pending approval procedures. The delayed adoption of these remedies, which are still not yet effective, demonstrates the passive regulatory approach of the BNetzA over the past few years to promoting competition in the new NGA broadband environment. This has lead to a first-mover advantage for the incumbent.

In this regard, in January 2010 the incumbent applied to the NRA for authorisation of its proposed rates for access to its passive infrastructure and dark fibre. However, at the same time, the Supreme Administrative Court revoked that part of the BNetzA's ruling which grants access to dark fibre.

In March 2009, the BNetzA adopted regulatory measures on the levels of mobile terminations rates (MTR) for the four mobile operators, effective from 1 April 2009 until 30 November 2010. However, the BNetzA failed to notify both the proposed MTR levels and the underlying cost accounting methodology under the Community consultation mechanism required by the regulatory framework since it considered that such was not required. Consequently, the Commission launched an infringement procedure.

The BNetzA has decided to conduct an assignment of radio frequencies in the range 790-862 MHz (a part of the digital dividend spectrum) in a simultaneous auction procedure together with other frequency bands (at 1.8 GHz, 2.0 GHz and 2.6 GHz). In October 2009, the BNetzA adopted the rules for this spectrum auction together with rules for spectrum re-farming upon request, including the 900 MHz band currently used for GSM services. Following intensive contacts on the conformity of these rules with the Community principles of objectivity and non-discriminatory treatment of undertakings and exchange of additional information between the Commission and the BNetzA, the BNetzA decided to continue with the schedule for the auction. However, the NRA has committed to an evaluation of the competitive conditions on the mobile markets within three months of the outcome of the auction procedure. The two smaller mobile operators have appealed the auction rules. In this respect, a national administrative court has taken initial decisions in two summary proceedings which suggest further judicial investigation without suspending the auction.

Organisation of the NRA

The BNetzA has responsibility for regulation of electronic communications, postal services, electricity and gas supply, and railways. About 11 % of its staff and two of its ruling chambers are dedicated to e-communications and spectrum management.

The rules for appointment and dismissal of the president and vice-president of the BNetzA as well as the concentration of important regulatory decisions in the presidential chamber of the NRA have been criticised by the German Monopoly Commission[139].

Decision-making

The decision making process of the BNetzA continues to involve lengthy proceedings which can impede effective regulation. For example it may take more than 2 years to carry out a complete market analysis and to impose remedies. The practice of separate notifications of market analysis and remedies continues to lead to delays. In some cases, e.g. ATM bitstream and partial-private-circuits (PPC), remedies appear to have become outdated before their eventual enforcement, thus not meeting market demands. In addition, the lengthy judicial review process for most regulatory decisions creates periods of legal uncertainty.

The BNetzA launched and partly completed several second-round analyses of wholesale and retail markets. With regard to retail markets, the NRA deregulated the markets for local and national telephone services and also proposed the removal of remedies in the leased lines market. In the market for access to the public telephone network at a fixed location it was proposed to maintain the previous regulation, which also removed the obligation of prior notification.

With respect to wholesale markets, the NRA completed its analyses of the markets for call origination and termination at a fixed location, and also notified the corresponding remedies to be imposed on the incumbent. Furthermore, the BNetzA analysed and notified the markets for mobile termination for mobile virtual network operators (MVNO). The NRA decided to remove regulation from the market for transit services. In fulfilment of a decision by a regional administrative court, the BNetzA re-imposed price control obligations in the market for broadcast transmission services. A second-round analysis of this market and the market for terminating segments of leased lines is still pending.

The wholesale broadband markets were subject to public consultation at the end of 2009 including VDSL access and fibre-to-the-building (FTTB) but excluding fibre-to-the-home (FTTH) access. So far, the incumbent has not revealed any plans to roll out FTTH. In this regard, the BNetzA's planned shift to ex-post price regulation in the wholesale broadband markets may adversely affect the competitive position of alternative operators in light of the possible switch-off of main distribution frames following the incumbent's steady migration to fibre-based infrastructure.

The first-round regulatory measure on the market for IP bitstream was revised and re-adopted by the NRA, following a judgement of the Supreme Administrative Court. Furthermore, the regulator issued individual rulings under the current remedies for the market for wholesale unbundled access. These grant access under price control for competitors to specific switches in areas where this is necessary to provide DSL services at downstream speeds of at least 1 Mbps, thus facilitating in particular the offering of competitive broadband services in rural areas.

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[139] As stated in the annual report of the German Monopoly Commission on the stat of competition in the German telecommunications market, 14 December 2009 (see paragraph 150).

MARKET AND REGULATORY DEVELOPENTS

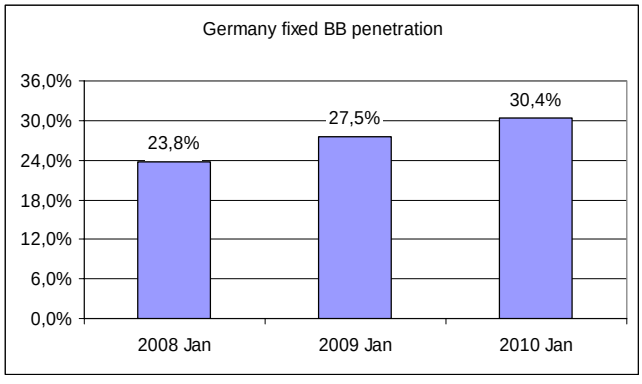
The total turnover of the German telecommunications sector amounted to € 62.3 billion at the end of 2008 which is a decline of 2.5% compared to the previous year. The revenue from the fixed markets was € 36.8 billion (€ 38.1 billion in 2007), and from the mobile markets was € 25.5 billion (€ 25.8 billion in 2007). The total value of investments by fixed telecommunications operators (including the incumbent) was € 5.0 billion and by mobile operators was € 2.2 billion. The total investment in the communications sector was therefore of € 7.2 billion (up by 1.4% compared to 2007) or just 0.3% of the gross domestic product. The alternative operators invested 58%[140, 141] of the overall total.

While infrastructure based competition has intensified, the importance of resale has declined. Although the incumbent has not yet extended the scope of its investment to FTTB or FTTH, there is a considerable number of regional providers deploying and/or operating fibre-based infrastructure (city carriers, municipal utilities and energy utilities). Utility companies and fibre operators are continuing to co-operate on sustainable investment in broadband infrastructure. Cable operators have continued to expand their market share in broadband and triple-play services and are launching products at speeds of up to 100 Mbps.

The incumbent's strategy still seems focused on obtaining regulatory forbearance as a pre-condition for deploying last-mile fibre access infrastructure. At the end of 2009, the incumbent merged its fixed and mobile arms into one entity. It continued to expand its VDSL network in 50 large cities, covering approximately 10 million customers[142]. The incumbent offers triple-play services (via VDSL and ADSL2+) and has launched a VDSL-based double-play retail product (without IPTV). The largest alternative fixed operator has also advanced plans for expanding its own VDSL network.

Broadband

Market situation



The growth rate in the number of new broadband connections has declined although there are signs of increasing platform competition. The incumbent and the second largest operator attracted most of the newly connected DSL customers.

In January 2010, the fixed broadband penetration rate was 30.4% (up from 27.5% in January 2009), which is above the EU average of 24.8%. There were nearly 100 alternative broadband operators (mainly regional) on the market. 85.4% of all fixed broadband connections operated at a speed of at least 2 Mbps, whereas 24.8% of all connections had speeds exceeding 10 Mbps. The proportion of broadband lines with

140 This estimate is taken from the Dialog Consult/VATM market study "11. gemeinsame Marktanalyse 2009", based on a poll of the member companies of VATM.

141 The BNetzA estimates the proportion of investment by alternative operators at 54%.

142 This figure includes also cases, where the incumbent operator has deployed indoor VDSL access multiplexers allowing the provision of VDSL access to customers closely located to one another.

download speeds exceeding 50 Mbps including VDSL, cable and fibre technology largely exceeded 1%.

The incumbent operator's market share of all fixed broadband lines in January 2010 remained stable at 46.2% (47% in January 2009), whereas it was 51.8% including resale lines. The cable operators' broadband market share has again grown significantly reaching 8.3%.

DSL remained the main form of broadband access with a market share of 89.8% of all fixed broadband lines in January 2010. Alternative operators provided slightly less than half of all DSL lines (48.7%). The main form of access used by alternative operators was full local loop unbundling (LLU, 78.7% of the alternative broadband lines) and resale (12.7%), whereas bitstream accounted for just 7.7%. The average monthly rental price of a full LLU connection in October 2009 fell slightly to € 10.20 (down by 2.9% compared to one year before).

In December 2008, 27.1% of the population were using bundled offers, the vast majority of which were double play. Retail prices for DSL-based flat and bundled offers remained stable during 2009.

Alternative DSL providers reported declining growth rates due to high costs for new customer acquisitions and a small margin between the rental costs for last mile infrastructure and the average revenue per user. In May 2009, the second largest alternative fixed broadband provider (United Internet) increased its fixed-line market share by acquiring the DSL business of another competitor (Freenet).

While the take-up of VDSL-based IPTV had progressed quite slowly, the incumbent managed to win a large number of new customers and claims to have reached 1 million IPTV customers at the end of 2009 − most of these having ADSL2+ connections. In general, more triple-play customers have been acquired by adding internet service to a current TV subscription via cable access than by adding IPTV service to an existing broadband DSL connection. The ease of access to content is reportedly a key product differentiator for DSL-based TV services.

In July 2009, the incumbent signed agreements for wholesale VDSL bitstream with some of the largest alternative fixed operators. The incumbent and the largest fixed competitor announced regional co-operation on the parallel deployment of NGA, which is based on mutual access to passive infrastructure. The incumbent also co-operated with regional fibre-based carriers for the purpose of complementary deployment of NGA infrastructure. Despite these market-driven developments, the competitive environment on the wholesale market for next-generation broadband access, which also includes VDSL bitstream access, still requires consistent regulatory attention. Alternative operators have requested the BNetzA to develop a framework for fair prices that provide incentives for all market participants alike to invest in broadband expansion.

A new association of fibre-based operators was founded in February 2009 (Bundesverband Glasfaseranschluss, BuGlas). BuGlas members − mainly regional FTTB/FTTH operators − reported the investment of € 275 million in infrastructure as well as the provision of half a million broadband connections to households in large and medium size cities in 2009. They are offering both wholesale and retail products (double-play, triple-play) which are mostly based on FTTB and, less often, on FTTH, with speeds of up to 100 Mbps.

Cable operators strengthened their position by continuing to upgrade their broadband connections in terms of transmission speeds and service diversification. Cable-based broadband access, with typical maximum transmission speeds of 32 Mbps, is now offered also at a speed of up to 100 Mbps (DOCSIS 3.0 technology). More than 60% of the German households are covered by cable connections. According to the association of German cable providers, the sector plans to invest a further € 700 million in upgrading cable networks in the next few years. However, cable stakeholders have expressed concerns about possible interference with TV equipment arising from the opening of the digital dividend to mobile services.

The use of mobile broadband continued to grow and reached 2.6 million customers in 2009 using dedicated cards, modems or keys. However, residential customers do not yet consider mobile broadband connections as a viable substitute for fixed in terms of bandwidth and quality-of-service and also partly due to lack of radio coverage.

Regulatory issues

In accordance with the Government's broadband strategy, the BNetzA launched in May 2009 a public consultation on its overall approach to NGA regulation. This approach concentrates on the principles of risk reduction, promoting investment and innovation, planning security, and transparency. In its NGA strategy, the BNetzA gives preference *inter alia* to voluntary commercial agreements, longer periods between regulatory reviews (3 years), innovative tariff models (e.g. fixed cost sharing), and appropriate access price regulation. In addition, in November 2009, the NRA published a report on 'consistent price regulation' addressing both, consistency between wholesale and retail rates as well as between various business models. Furthermore, the BNetzA outlined the growing challenges for assuring consistency resulting from the migration towards packet-switched networks. In order to facilitate co-operation and enable synergies for the deployment and co-usage of broadband infrastructure (ducts, fibre, masts etc.) the BNetzA has launched a national infrastructure atlas in December 2009 containing data on existing fibre lines, ducts, radio towers and masts as well as radio stations. However, despite these efforts, market awareness of the BNetzA's regulatory initiatives on NGA remains low.

Furthermore, the NRA announced that it will conduct an auction of a part of the digital dividend spectrum (790-862 MHz) for the provision of electronic communications services, which will include an obligation for rural coverage.

In March 2009, the BNetzA imposed an obligation on the incumbent to grant access to switching distributors (Schaltverteiler) in areas, especially rural regions, where this is necessary to enable competitors shorten the length of their last-mile cable deployments with the aim of providing DSL-services with a bandwidth of at least 1 Mbps downstream. The NRA also re-imposed its remedy for IP bitstream access as a consequence of a ruling of the Supreme Administrative Court which had revoked the obligation of approval of charges for formal reasons. Prices for IP bitstream fell slightly in September 2009 (down by 4.3%), with effect until 30 November 2010. A second-round analysis of the wholesale broadband markets has been launched.

Alternative market players have also been raising concerns as to how the incumbent fixed operator will proceed with the future closure of obsolete main distribution frames (MDF). Under the current reference offer, the incumbent may not cease to offer unbundled access to the local loop via MDF.

The BNetzA also approved in March 2009 a marginal reduction of the wholesale price for fully unbundled lines, effective from 1 April 2009 until 31 March 2011 (at € 10.20 per month). Alternative fibre-based operators are opposed to further reductions in the regulated prices for unbundled and bitstream access. Furthermore, while they don't object to deregulation as such, they criticise the lack of clear procedures for the transition from ex-ante to ex-post regulation. Finally, they argue in favour of higher termination rates for fibre networks in order to reflect high investment costs.

Many alternative operators are supportive of an open access model for NGA development, which envisages *inter alia* access to street cabinets for any operator and at any time of market entry at cost sharing terms which are based on proportionate remuneration of earlier investments. The BNetzA has addressed this issue in its draft paper of May 2009 on "Key elements for progressing modern telecommunications networks and creating powerful broadband infrastructures", where the NRA welcomes the non-discriminatory implementation of cooperation models.

Mobile

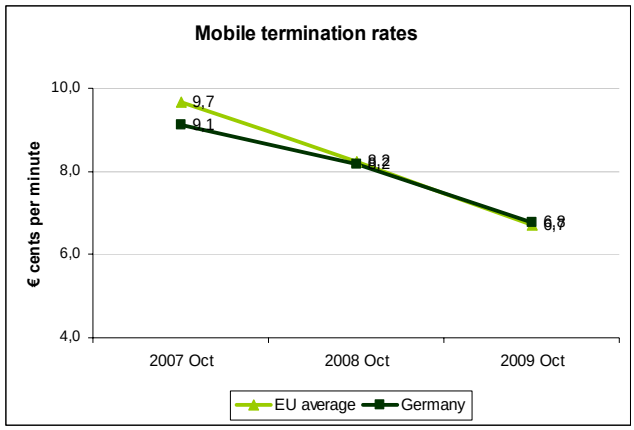
Market situation

The mobile penetration rate in October 2009 reached 131.9% (up from 128.9% in October 2008), which remains well above the EU average of 121.9%. The mobile broadband penetration rate in terms of users accessing data services via dedicated data modems, cards or keys was 4% in January 2010 (up from 1.8% in January 2009). Mobile operators' market shares have been relatively static with the two largest mobile operators covering about two thirds of the mobile subscribers. The incumbent's market share by subscribers was 36.6% in October 2009 (35.8% one year before). The main competitor held a market share of 32.1% (33.5% one year before). The third and fourth mobile network operators had a total market share of 31.3% (30.7% one year before). The largest mobile service provider (Freenet), which had acquired another competitor (Debitel) in 2008, had attained higher revenues than each of the two smaller mobile operators. The proportion of pre-paid mobile users increased to 56%.

Mobile data services were the main driver of revenue growth. The average revenue per user has dropped from € 280 in 2007 to € 248 in 2008 (by 11.4%). In this period, the average price per minute of mobile calls has fallen from € 0.17 to € 0.14 (by 17.6%). SIM-only and MVNO products were preferred by consumers seeking low-cost options. It is argued by the operators that the increase in non-voice (messaging and data) revenues did not compensate fully for the continued pressure on voice service revenues arising from cuts in MTR, lower roaming prices and stronger competition.

All mobile operators have continued expanding 3G network coverage and are upgrading these to high-speed packet access at downstream speeds of up to 7.2 Mbps.

Regulatory issues



The BNetzA adopted new decisions on MTR as of 1 April 2009 but did not notify the Commission of the exact MTR levels and the cost accounting methodology applied. The termination rates for the two big operators were set at 6.59 €-cents per minute (down by 16%) and for the two smaller operators at 7.14 €-cents per minute (down by 19%). In effect, in October 2009 the average MTR fell to 6.76 €-cents per minute (down from 8.19 €-cents in October 2008). Germany also notified remedies on the mobile termination markets of two MVNOs.

However, the incumbent's mobile operator still does not appear to be passing MTR reductions to its customers using standard tariff options. Furthermore, MTR reductions do not seem to have led to a proportionate reduction in end-user prices for fixed-to-mobile calls, both for the incumbent and alternative operators[143]. In this regard, it is important for the NRA to monitor market developments closely.

Roaming Regulation

All mobile operators have reported timely implementation of the tariff provisions of the amended Roaming Regulation from June 2009. Germany complied with the first Roaming Regulation of 2007 in full only in 2009 by including the provisions on penalties in its Telecommunications Act.

Fixed

Market situation

As of July 2009, the proportion of telephone subscribers using direct access to an operator other than the incumbent increased to 33.0% (up from 28.0% in July 2008) as a result of increasing competition from alternative telecom operators (either with own infrastructure or LLU-based) and cable operators. Analogue or ISDN connections are less popular as customers increasingly choose broadband connections including VoIP.

While the total number of alternative operators in Germany was 181, the number which offered public telephony through direct access rose to 137 (including shared access). 36% of all alternative operators used full LLU, whereas 31% utilised proprietary infrastructure[144] and only 9% used shared access. The use of alternative operators' services for national and international calls increased from 37% to 40% and from 39% to 42%, respectively, in the period July 2008 - July 2009. The demand for VoIP grew and reached 13% of all voice traffic

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143 This has been confirmed by the German Monopolkommission in its annual report on the state of competition in the German telecommunications market of 14 December 2009 (s. Paragraph 75).

144 Cable operators have the largest share when it comes to ownership of the access network, whereas the share of city carriers is very small.

volumes as of December 2008. The proportion of the volume of outgoing voice minutes using call-by-call and pre-selection in 2009 fell significantly to 29.3% (from 39.4% in 2008)

Regulatory issues

While the incumbent launched a double-play all-IP retail product, the BNetzA also included all-IP access lines in its draft remedies for the markets for access to the public telephone network at a fixed location. These remedies refer to the 'complete access line' (Komplettanschluss), which bundles the access line with the telephone service so that the user does not need an additional line for telephone calls. After the notification of the relevant market analysis in March 2009, in November 2009 the NRA notified remedies for these markets − where the incumbent voluntarily offers resale products − based on ex-post price control.

The BNetzA decided in 2009 to deregulate the fixed national calls markets and the wholesale market for transit services in line with the latest Recommendation of the Commission on relevant product and service markets of 2007[145].

International operators which focus on business customers complain that the BNetzA does not pay due attention to the specific service requirements of business customers at more remote national locations. In particular, the NRA responsiveness to market demand with respect to upgrades in leased lines interface technology seems slow. In this regard, the retail market for leased lines has been analysed by the BNetzA for a second time. The regulator did not find the incumbent to have significant market power. Since their adoption in October 2007, the regulatory remedies for leased lines have been subject to implementation delays. Despite an access obligation on the incumbent operator, alternative operators claim that PPC or Ethernet wholesale products are not available. In addition, the incumbent has introduced offers with an Ethernet interface into the market, however, these products do not appear to correspond to the market demand in terms of bandwidth and service parameters. According to the NRA, alternative operators have not adequately specified their requirements during negotiations with the incumbent.

Broadcasting

Market situation

The overall situation in the retail broadcasting markets remained stable. In July 2009, end-users mainly used cable (46.6% of households) or satellite (40.9% of households) access. The share of households with digital terrestrial television (DVB-T) reached 6.9%. Television via DSL ("IPTV") gained a significant number of new customers and reached 0.7% of all households[146].

145 Commission Recommendation 2007/879/EC

146 In comparison, according to the '2009 Digitisation Report' published by the Association of Media Authorities for Broadcasting of the German Bundesländer, the proportion of households using cable, and satellite in June 2009 was 52.8% and 42.1%, respectively. The share households using DVB-T was 11.3%. In general, 55% of the German households (37.4 million in total) had access to digital TV (more than one TV reception path per household may be available).

Regulatory issues

The BNetzA notified to the Commission the re-imposition of a remedy for the broadcasting transmission services market, following a decision of an administrative court in Germany. A new round of analysis of this market is expected to be finalised in early 2010.

The switch-off of analogue terrestrial broadcasting in Germany was completed at the end of 2008. The release of broadcast radio spectrum for fixed and mobile services in the frequency range for the digital dividend (790-862 MHz) was decided in July 2009 by amending the frequency allocation ordinance with the agreement of the Bundesländer.

Horizontal regulation

Spectrum management

The German NRA adopted in October 2009 a decision on the rules of a joint auction of 360 MHz of radio spectrum (scheduled for April 2010), including a part of the digital dividend spectrum in the frequency range 790-862 MHz, and a decision about the terms of re-farming of certain frequency ranges, including the GSM band at 900 MHz. Given the potential of this valuable digital dividend frequency resource, an assessment of the competitive situation on the mobile markets by the NRA, in line with the requirements of the amended GSM Directive[147], has become crucial. Taking into account the outcome of the future auction and the current frequency assignments in the GSM band, the BNetzA has already committed itself to examine whether the existing spectrum assignments in the 900 MHz band to mobile operators are likely to distort competition in the relevant mobile markets and, where justified and proportionate, to address such distortions. The Commission is following the matter.

Implementation of spectrum decisions

As regards frequency harmonisation at European level, most Commission decisions adopted by the end of 2008 are implemented. The implementation of the Decision 2007/344/EC on the harmonised availability of information regarding spectrum use is still under way.

Germany failed to implement the Commission Decision 2008/477/EG on the harmonised use of the 2.5-2.69 GHz frequency band for electronic communications by allocating this frequency band solely to mobile services in the national frequency allocation ordinance, which as such has created legal uncertainty with respect to the use of other wireless services, in particular fixed services, in this band. In this regard, the Commission launched an infringement procedure in October 2009 to ensure that there are no restrictions for the usage of the 2.5-2.69 GHz frequency band for fixed wireless as well as other innovative applications.

147 Directive 2009/114/EC of the European Parliament and of the Council of 16 September 2009 amending Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community (Text with EEA relevance), OJ L 274, 20.10.2009, p. 25–27.

Administrative charges

The BNetzA does not include in its annual budgetary report, or the following year's draft budget, a comparison on how the levels of collected administrative charges reflect underlying administrative costs. In accordance with the provisions of Community law[148], this is necessary to provide a reference for determining whether adjusting these charges may become necessary. The Commission services are looking into the matter.

THE CONSUMER INTEREST

Tariff transparency and quality of service

The transparency of DSL offers with respect to the actual download rates and related contractual obligations continued to be the subject of complaints by German citizens to the NRA.

An amendment of the Telecommunications Act entered into force on 1 March 2010, which improves tariff transparency and strengthens consumer rights by imposing price caps for calls to service numbers from mobile phones at € 0.42 per minute or € 0.60 per call, depending on the destination number[149]. However, the BNetzA may decide to set different price caps based on market analysis.

Universal Service

In Germany no undertaking is designated for the provision of universal service. The State authorities have not intervened as they consider that the market provides the necessary services.

In December 2009, a request for a preliminary ruling was submitted by the German Supreme Administrative Court to the European Court of Justice regarding the question as to whether a member state may require electronic communications service providers to make available data in their possession of subscribers of other providers for the purpose of the provision of directories and directory enquiry services, and if so, whether such a requirement may depend on the consent of, or at least the lack of objection by, the other electronic communications service provider or its subscribers to the transmission of the data[150].

Users' access to the Internet and network management

The possibility to make voice-over-IP (VoIP) calls over the mobile access network as a part of 'mobile internet' offers has become a topic of controversy in Germany. The NRA requested all mobile operators in May 2009 to explain their practices but found no grounds to intervene. Three out of four mobile operators reported that they have enabled their customers to use

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148 Cf. Article 12(2) of the Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive).

149 Bundesgesetzesblatt Jahrgang 2009, Teil I Nr. 49 (3. August 2009), Erstes Gesetz zur Änderung des Telekommunikationsgesetzes und des Gesetzes über die elektromagnetische Verträglichkeit von Betriebsmitteln vom 29.07.2009, p. 2411, Art. 2, Abs. 4c.

150 C-543/09.

VoIP services – either without restrictions or – as in the case of the two larger operators – charging an additional tariff for VoIP use.

Number Portability

In 2009, the average period for having a phone number ported and operational was five working days both for fixed and mobile numbers. However, in case where notification of contract cancellation is timely, consumers normally have their numbers ported to their new provider without any delay. No wholesale charges are applied for porting fixed numbers and the retail price charged by the incumbent operator is no longer regulated. However, the price of € 5.81 still applies. No wholesale charges are applied for porting mobile numbers, yet mobile operators charge retail customers between € 21 and € 30 for porting a mobile number.

Between 1 October 2008 and 1 October 2009 there were 659 368 newly ported mobile numbers giving a total of 2 647 015 ported mobile numbers in Germany (2.5% of all mobile subscriptions). The number of ported fixed (geographic) numbers in Germany slightly exceeded 58.5 million on October 1 October 2009.

Consumer complaints

According to the BNetzA, consumer complaints in 2009 were focused on number portability, contractual relations and conditions of licensing.

Certain complaints have also been directed to the Commission. Some citizens are concerned about the lack of possibility to use broadband internet in rural areas or the lack of choice. An increasing number of complaints referred to difficulties when changing a fixed or broadband provider, which have led to periods of up to several weeks and even months without telephony services or a broadband connection.

European emergency number 112

As indicated in previous reports, 112 has been operational in Germany for many years. Whilst 75% of the Germans know 112 as a number to call in case of emergency in Germany, only 18% are aware that this emergency number can be called from other Member States. The proportion of interviewees who said they had received information about 112 in the last 12 months has also increased from 10% in 2009 to 16% in 2010, which is below EU average (22%)[151].

The Commission has been in close contact with the State Government of the Bundesland Baden-Württemberg in order to ensure that concrete measures for raising awareness of the use of 112 and of its co-existence with the regional non-emergency-number are taken so that a complaint by a citizen's initiative on this issue could be settled. Consequently, legislative steps were taken in Baden-Württemberg in November 2009 in order to change the state law on emergency services (Rettungsdienstgesetz).

Harmonised numbers for harmonised services of social value (116)

In Germany, harmonised services of social value are currently offered under the harmonised numbers 116111 − the child helpline, since December 2008, and 116123 − the emotional

[151] Eurobarometer Flash survey on the European emergency number 112 (February 2010)

support helpline for life aid, since March 2009. At the time of writing the BNetzA was planning a tender for assigning the harmonised numbers 116006 (helpline for victims of crime) and 116117 (for non-emergency medical call services).

Must-carry

In 2009, the Commission terminated its infringement procedure against Germany after the European Court of Justice − upon a request for a preliminary ruling by a German national court with regard to must-carry legislation for the Land of Lower Saxony (C-336/07) − ruled that the provisions of the Universal Service Directive do not preclude national legislation from requiring a cable operator to carry channels and services over its analogue cable network television that are already broadcast under DVB-T, even if this results in the utilisation of more than half of the channel capacity available. In the event of a shortage of available channels, national legislation can also provide for an order of priority of applicants, which may result in full utilisation of the channels available on that network. The Court stated, however, that these obligations should not give rise to unreasonable economic consequences, which is a matter for the national court to establish.

E-privacy

In August 2009, the German legislature adopted a comprehensive new law package on data protection, which laid down stricter conditions on the transmission of personal data as well as higher penalties. The new legal provisions lay down the right of a person, whose data have been circulated, to be informed about the particular data transferred and their origin in order to be given the opportunity to appeal. Providers must keep relevant documentation for at least 2 years and ensure transparent information about any data leaks which may occur. Automatic data processing systems for marketing purposes or opinion polls have to be registered with the supervisory authority. Furthermore, the ability to make a purchase via the internet may not be conditional upon the customer's consent to allow personal details be used for marketing purposes.

In this regard, the incumbent reported the adoption of a set of remedies aimed at counteracting the consequences of previous cases of data leakage and at improving the level of data protection for its customers.

At the time of writing this report the German constitutional court was dealing with numerous pending constitutional complaints about the provisions on data retention (Vorratsdatenspeicherung), which were adopted in 2007 and partly incorporated in the Telecommunications Act. As of 2004, the Telecommunications Act contains provisions on the collection and retention of certain personal data for mobile pre-paid customers such as name, address, date of birth and the identification number of the mobile device.

The adoption of a law on blocking the access to child pornography content via communication networks (Zugangserschwerungsgesetz) was pending at the time of writing the report.

GREECE

INTRODUCTION

The Greek electronic communications market in 2009 depict positive trends in all segments of the market, most importantly though, in the broadband market. Increased investments in the wholesale broadband access market coupled with the strong uptake of retail products bundling broadband access, resulted in higher rates of broadband penetration. Greek consumers demanded higher broadband speeds, enjoying products and services of better quality. Mobile penetration increased further and flat rate packages with unlimited volume of on-net calls were offered. The continuous development in the unbundling of the local loop also intensified the retail competition on the fixed market. The Government's initiatives for enhancing network infrastructure deployment along with the incumbent's intention to upgrade its copper network give positive signals that these trends might be maintained.

Notwithstanding these positive trends, the market still lacks a regulatory framework for the granting of rights of way, and is being hampered by the complicated procedures for the licensing of masts and base stations. An awaited decision by the Plenary of the Council of State (Highest Administrative Court) is expected to clarify the jurisdiction of the Appeal Court and determine the effectiveness of the appeal mechanism against the decisions of the regulatory authority.

REGULATORY ENVIRONMENT

Main regulatory developments

Following early national elections in Greece held in October 2009, the former Ministry of Transport and Communications was renamed the Ministry of Infrastructure, Transport and Networks, which maintained all the responsibilities for the electronic communications sector, and added new competences in public works and maritime policies. The new Government's strategic directions for the electronic communication sector focus on enhancing broadband penetration and addressing the digital divide, on progressing with the transition to digital terrestrial transmission, and on addressing some of the issues preventing the Greek electronic communications market from reaching its potential.

In September 2009, the National Regulatory Authority, Εθνική Επιτροπή Τηλεπικοινωνιών & Ταχυδρομείων, (Hellenic Communications & Post Commission, "EETT") has seen the appointment of its new 9-member Plenary. EETT's main priorities for its four-year mandate include the further development of broadband products and services throughout Greece, the efficient use of spectrum (in light of the digital dividend, the expiration of the GSM licenses in 2012, and the assigned spectrum for fixed wireless access), as well as the protection of consumer rights.

While the changes at governmental and regulator's level went smoothly, market operators raised concerns regarding the long-awaited adoption of secondary legislation on rights of way which is now delayed anew given the need for re-examination of the initial draft legislation by all nine competent Ministries. Risks in running late with the transition to digital terrestrial transmission are possible, while no decisions are yet taken on the calculation and use of the digital dividend. Though the new Government strongly supports the installation of a nation-wide fibre optic network that would give access to broadband services to 2 million homes and

businesses, the original provisional timeframes of the project are now postponed anew until the re-examination of the project's parameters. The initial ambiguity regarding the plan's design, feasibility, and implementation has sent confusing signals to market players who have temporarily put on hold their investment plans. Adherence to the announced deadlines is essential for the credibility and clarity of the project.

Plans to revise the national law 3431/2006 'Περί Ηλεκτρονικών Επικοινωνιών και Άλλες Διατάξεις 3431/2006' (Law on Electronic Communications and Other Provisions) are underway. As a consequence of the change of government, the timetable for the submission of the draft legislation before the Greek Parliament has been pushed back. Principally, the latest version of the draft law (September 2009) provides for the establishment of a National Observatory for Electromagnetic Fields, mainly to address public health concerns. In addition, it aims at amending certain provisions concerning the spectrum management, appeal mechanism, administration of EETT, the procedures for the licensing of base stations and antennas, and the granting of rights of way. In public statements, the Government also indicated its intention to amend the method of appointment of the EETT's board. The revised national law would re-establish the procedures followed before the adoption of Law 3371/2005, whereby the President and the two Vice-Presidents of EETT were appointed by the qualified majority-voting of the Conference of the Presidents of the Parliament. Therefore, the current procedure of appointment by the Council of Ministers following a parliamentary hearing would be dropped.

Organisation of the NRA

EETT is an independent authority which enjoys financial and operational autonomy as entrusted by national law. Its financial resources are based mainly on fees (licensing and numbering fees) and to a lesser extent on fines and interests. EETT currently has a staff of 196 employees. An additional 25 professionals were expected to join the regulatory authority, as a result of a call for applications.

EETT nominated the year 2009 as the 'Year of Broadband Convergence of Telecommunications with the Press and Media' mirroring the initiated convergence in the Greek electronic communications market. To that end, it geared its legislative and monitoring role towards further enhancing the broadband market, establishing a level playing field for converged products and services, while also promoting initiatives for a political debate on the digital switchover and digital dividend.

In general, EETT has been successful in carrying out its tasks with a noticeable impact in all segments of the market (enhanced competition in retail markets, increased availability of wholesale products, increased transparency in its decisions, and a decreased number of consumer complaints). Market operators noted the changes both in the government and in the leadership of the regulator, claiming that a period of uncertainty prevailed during the transition until the respective authorities signalled their main priorities during their terms.

Decision-making

During 2009, EETT finalised its work on submitting legislative input (according to the national law 3431/2006) to the Ministry of Infrastructure, Transport and Networks. Its last submission concerned the minimum obligations for ensuring the integrity of the public telephone network and availability of public telephony services at fixed locations. Other regulatory interventions related to the modifications of the national numbering plan, the

regulation of domain names, and the Regulation on General Authorisations to address the licensing of digital broadcasters. Work has also been undertaken in the area of universal service.

Regarding its *ex ante* market monitoring role, EETT analysed and adopted final measures for the markets of wholesale network infrastructure access at a fixed location, and the market of wholesale broadband access. It intended to analyse the remaining markets listed in the Commission's Recommendation on relevant products and service markets of December 2007, and those markets found non-competitive in the first round of market analysis (applying the three criteria test) by March 2010.

In April 2009, following EETT's approval, the 2009 prices for regulated retail and wholesale services for which the incumbent was imposed obligations of cost-orientation were available to the market. EETT also audited the cost-accounting templates and accounting separation reports provided by the incumbent, and mandated the incumbent to publish the accounting separation reports, including the comments and the approved LRIC templates, on its website.

During the reporting year, EETT conducted hearings and imposed fines exceeding in total €13.5 million on market operators for violations of the electronic communications and/or competition law[152], with the reporting figure excluding fines imposed for the illegal installations of antennas, masts, or for violations regarding radio-equipment. The vast majority of these fines were imposed on the incumbent.

Market players' criticism regarding the decision-making process focused mainly on the handling of the appeals against EETT's decisions. In practise, EETT decisions (administrative and regulatory) are generally appealed. The law 3431/2006 amended the procedures for appealing cases. According to it, EETT's decisions and fines imposed are subject to appeal before the Administrative Court of Appeal which has the right to examine a case in its substance. In practise, the Appeal Court takes about 18 months to issue a decision. Prior to Law 3431/2006, EETT's decisions were subject to a petition of annulment before the Council of State. This Court was restricted to examine the legality of the appealed decision and not its substance. Two divisions of the Council of State considered that it was unconstitutional to have appeals of regulatory decisions addressed by the Administrative Court of Appeal and in April 2008, they referred the case to the Plenary of the Council of State for a final decision. To date, a final decision of the Plenary is still pending. So far, no decisions on the appeals brought before the Council of State (around 20 cases) have been taken.

In the meantime, pending the outcome of the appeal, EETT's decision shall stand unless the Appeal Court decides otherwise. In practice, the ambiguity regarding the respective jurisdictions of the two bodies and the delays in issuing decisions on appeals create legal uncertainties, with operators often flouting legal obligations until final decisions are taken.

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152 According to the national law on electronic communications 3431/2006, in case of an infringement of the provisions of this law, EETT can impose sanctions, including warning fines between €7 000 and €2 million or ask for a suspension or recall of the right to provide telecommunication services. In addition, under its competition powers in the electronic communications market, EETT can impose much higher fines in case of an infringement of the provisions of the Greek Competition Law 703/1977 (up to 15% of the gross income of the offending party).

EETT, under its competition law competence in the electronic communications market, investigated and approved the change of control of a satellite operator, and the establishment of DIGEA, a new digital network provider in the Greek broadcasting market.

MARKET AND REGULATORY DEVELOPMENTS

The total revenue of the Greek electronic communications sector for the year 2008 was €8.17 billion (decreasing from €8.44 billion in 2007), of which €3.67 billion came from the fixed market and €4.5 billion from the mobile market. Investments in the electronic communications sector have grown from €1.29 billion in 2007 to €1.37 billion in 2008, of which €566 million were made by the incumbent in the fixed telephony network, €321 million by alternative operators, and €483 million by mobile operators. Interestingly, the incumbent's investments contributed by 41.3% to the total amount of investments in the Greek market (compared to 22.8% in 2007) while the share of alternative operators' investments reached 23.4% (compared to 39.8% in 2007). The investment over revenues ratio in the Greek telecom sector for 2008 was 16.8%.

Market players considered that the economic crisis, hitting Greece considerably, has affected small businesses strongly, with some closing down and others postponing their investment plans due to credit constraints. On the consumer side, operators claimed that the economic crisis increased the demand for services of lower retail prices, but did not affect the volume of electronic communication products consumed.

The incumbent extended the development of its ADSL network nationwide with 1485 points of presence through which 94% of telephone connections are served. Its collocated sites in 2009 increased to 168 sites with physical collocation, and 609 sites with distant collocation (compared to 152 and 118 sites respectively in March 2008). The incumbent also announced its four-year investment plan to deploy fibre in the access network in urban and sub-urban areas based on FTTC architecture with VDSL^{+2} at cabinet level. Alternative operators were carrying on with their investments plans, building mainly on local loop unbundling. Most of their investments were undertaken in small towns and villages, under the funded programme for Broadband Access Development in Under-Served Territories. Mobile operators maintained the same level of investment activity, both in fixed and mobile networks, so as to be able to address consumer demand for bundled products and to supply mobile broadband.

More Greek consumers used bundled services this year. As the figures in July 2009 suggest, 8.5% of the Greek population uses bundled services (compared to 4.6% in January 2009). The vast majority (7.7%) uses double play including telephony and broadband while a marginal 0.77% uses triple services (fixed-mobile telephony and broadband). The number of subscribers choosing bundled products which include mobile telephony have increased this year to 13 500 in October 2009, compared to only 3 600 in October 2008.

The Greek authorities' plan for a national fibre broadband project (announced in February 2008) found clear support by the new Government. As the project's parameters stand currently, the aim of the project is to provide access to broadband services with a speed of more than 100MBps speed to at least 2 million households and enterprises in 56 cities across Greece. The design of the network foresees that Greece is divided into 3 geographical zones of equal investment interest, in terms of population density and of consumer purchasing power. Estimated to take seven years for the FTTH network roll-out, the project is to be co-financed by the Greek Government and private investments (approx. €700 million by the government and €1.4 billion by private investments) based on a Public Private Partnership

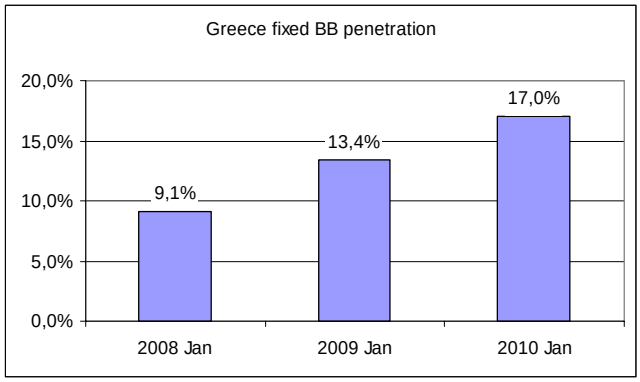
with a duration of 30 years. The initial project design suggest that the dark fibre network will be developed by the National Optical Fibre Infrastructure (E.FO.DIA.), which will also be responsible for the maintenance and for the supply of access to all electronic communications service providers on a non-discriminatory basis. E.FO.DIA. would not be offering electronic communication services to end-users.

The original timetable of the project has been pushed back, partly due to the change of government. Currently, feedback received from the public consultation (held on 5 August – 7 September 2009) on the draft legislation of E.FO.DIA. was being analysed. A notification of the project to the European Commission for compliance with state-aid rules is foreseen in the first half of 2010, after the Government has re-examined all of the project's parameters. A public consultation on the international tender and the launch of the tender is envisaged for the first half of 2011.

A new national project named DOR.Y aims to use satellite services for the deployment of a state satellite communications system intended to reach almost 1600 locations in Greece and address their needs for broadband access. Internet and intranet connectivity will be provided to public sector points of presence (e.g. schools, and government offices) particularly in areas that are currently broadband-wise inaccessible. The project is estimated to be fully developed in two years time.

Broadband

Market situation



The broadband market in Greece continues on its positive trend, reaching 17.0% penetration rate (13.4% in January 2009) with 1916 630 broadband lines in January 2010, compared to 1 311 221 lines a year ago. Factors contributing to this incremental trend include the effective regulation and the authorities' effort to promote broadband, the investments of alternative operators (mainly in LLU), the increase in collocated sites, and the significant increase in the take-up of bundled products. While Greece maintained its ranking position among the EU countries, the gap between Greece's broadband penetration with the EU average (24.8%) slightly narrowed. Greece recorded the third highest number of new fixed broadband lines per population (3.6 lines per 100 population) in January 2010.

The incumbent's market share of retail broadband connections decreased to 55.4% in January 2010 from 57.4% in January 2009 depending exclusively on DSL technology. During the same period, alternative operators increased their presence in the overall fixed broadband market, with their market shares increasing from 42.6% to 44.6%.

Greece ranks last among EU countries with regard to the number of broadband fixed lines using technologies other than DSL. The development and coverage of fibre access lines is still very limited with 2 625 fibre-to-the-home lines.

Broadband development is closely linked to the high uptake of physical interconnection and the LLU market. In January 2010, LLU contributed 41.5% of the retail broadband lines (794 678 LLU lines), significantly increasing since January 2009 (541 920 LLU lines – 36% of the retail broadband lines). 2.7% of the broadband lines are based on bitstream access lines (compared to 6.3% in end of 2008). This distribution mirrors the developments of infrastructure-based competition but also the lack of alternative networks in Greece.

Mobile broadband uptake in Greece has not developed as much over 2009. Its penetration increased slightly from 1.6% in January 2009 to 2.0% in January 2010. This percentage, calculated as the number of dedicated data services via modems, card, and USB keys, is lower than the 5.2% of the EU average (increasing from 2.8% in January 2009). This contrasts with the decrease in retail mobile broadband prices by almost 12% during the reporting year. Difficulties mobile operators are facing in deploying and maintaining their networks (licensing of base stations, and rights of way) may explain this slow trend.

Nominal access speeds have improved significantly. On retail level, all retail broadband lines had speeds higher than 2Mbps in January 2010, with 94.6% having speeds ranging 2-10 Mbps (compared to 24.8% in January 2009). 5.4% of broadband lines corresponded to packages with nominal download speeds above 10Mbps.

The roll-out of the funded project for Broadband Access Development in Under-served Territories, co-financing broadband investments for local access across Greece, reached its final stage, with operators concluding their investments and offering retail services. The project can claim its role in the uptake of local loop unbundling, which *inter alia* resulted after the rapid increase of distant collocation sites by the incumbent.

Regulatory issues

In July 2009, EETT published its final decisions concerning the market for wholesale network infrastructure access at a fixed location, and the market for wholesale broadband access. EETT designated the incumbent as an operator with significant market power in both markets, and imposed a full range of regulatory obligations, maintaining most of the obligations of the first round market analysis. In addition, it imposed an access obligation to additional facilities such as collocations and access to ducts and pipes, especially from the street cabinet to the incumbent's main distribution frame (thus, access on the three levels of the network). As to the price control obligation, EETT considered that the Long-Run Average Incremental Cost - LRAIC- cost methodology should replace the previously used retail minus methodology.

The current market analysis excludes any future developments of fibre access networks, but EETT committed to re-visit its analysis once new market developments occur. To that end, it would monitor the developments in the Government's plans to deploy a FTTH network, and the upgrading of the incumbent's network. Currently, the incumbent is required to submit bi-annually information on its network's development.

The incumbent submitted to EETT for approval its new Reference Unbundling Offer (RUO) and Reference Broadband Offer (RBO) in October 2009, and soon after EETT initiated public consultations on both offers. The obligation to publish a reference Bitstream Offer was maintained in this second round market analysis.

Mobile

Market situation

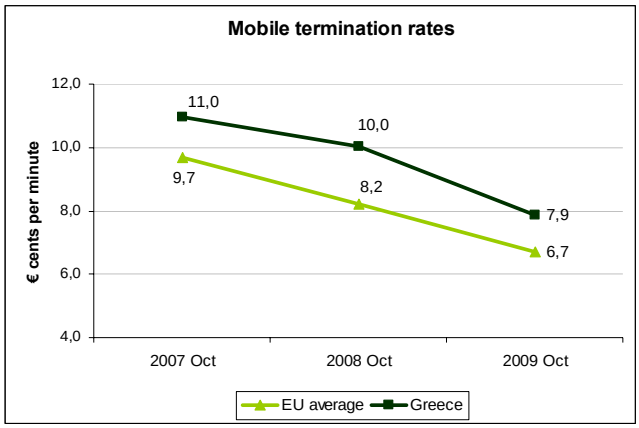
During the reporting year, all three mobile network operators (MNO) in Greece made use of their alliance with fixed operators and launched bundled offers incorporating mobile telephony. The subscribers base in Greece continued to grow, with the mobile penetration reaching 125.2% in October 2009 (122.2% a year ago), above the EU average of 121.9%. There is a strong trend towards pre-paid cards (64%) compared to post-paid contracts (36%). The average price per minute of mobile communication decreased from €0.16 to €0.14 (EU average €0.13) in December 2008.

Aggressive retail offerings in the market, with the launch of flat fee on post-paid contracts, determined market shares. The leading MNO continue to expand its customer base, acquiring a market share of 47.7% in October 2009 (43.1% a year ago), considerably higher than the average share of the leading operator in the EU (37.7%). Its gain in market share is mirrored in the shares of the second and third operator, which respectively had 26.1% (29.2% a year ago) and 26% (27.6% a year ago) of the market in October 2009.

Complying with the glide path imposed, all MNOs reduced their mobile termination rates (MTRs) to 7.86 €-cents as of 1 January 2009. Though 21% lower than last year, MTRs in Greece continue to be higher than the average MTRs in the EU, which equal to 6.70 €-cents. This difference was substantially reduced as of 1 January 2010, when the termination rates were reduced to 6.24 €-cents (to be further reduced to 4.95 €-cents as of 1 January 2011). In a period of three months from September 2009, all three mobile operators increased the minimum charged call duration from 30 to 45 seconds for the vast majority of post paid tariffs. This issue was being examined by EETT.

Regulatory issues

The third mobile operator appealed EETT's decision on the second round analysis of the market for voice call termination on individual mobile networks (published in October 2008) opposing the symmetry in the MTRs, and applying also for interim measures. The case has been referred to the Council of State which rejected the application for interim measures.



In July 2009, the government introduced new fiscal measures affecting the mobile sector. These measures foresee the increase of the special levy on post-paid mobile subscriptions which was first introduced in October 2006. In addition, it foresees an extension of this fiscal obligation to pre-paid mobile telephony. The levy imposed before VAT (19%) is calculated as a percentage of the monthly usage of mobile communications (post paid) of a mobile communications user[153]. As for the taxation on pre-

[153] The special levy imposed on post-paid mobile subscriptions increases with the monthly bill in a stepwise manner, as follows: for a monthly bill up to €50, the percentage of taxes is 12%; from €50.01-

paid cards, a percentage of 12% on the value of communication time before VAT (on new cards or re-loads) is imposed which the mobile operators have to submit to the state on a monthly basis. Mobile operators raised strong concerns on these taxes criticising that the measure was discriminative, as mobile broadband services are being taxed, while no taxes are imposed on fixed broadband services.

Roaming Regulation

In general, all mobile operators complied with the provisions of the Roaming Regulation of July 2007 in terms of the voice roaming pricing obligations, with tariffs ranging below or equal to the price caps. Regarding the amended Roaming Regulation, in force since July 2009, the first indications denote the compliance of the Greek mobile operators.

Fixed

Market situation

In the fixed telephony, service-based competition intensified, thanks to the continuous development of LLU which has reached 794 678 lines in January 2010. The market share of the incumbent in the fixed telephony market (by retail revenues) present a steady but slow decrease, being 70.5% in December 2008, loosing 3.1% market share in a year.

In July 2009, the Greek consumers depended to a lesser extent on the incumbent for direct access than a year ago, decreasing from 92.2% in July 2008 to 85.3% in July 2009, though still above the EU average of 76%. Directly connected subscribers to alternative operators nearly doubled from 7.8% a year ago to 14.7% in July 2009 (EU average at 24%). The wholesale line rental product, offered in the market since last year, is exploited by some operators but remains at low levels.

Termination rates in Greece are close to the EU average, lower for local interconnection (0.48 €-cents compared to the EU average of 0.52 €-cents), slightly higher for single transit (0.82 €-cents compared to 0.79 €-cents EU average), and slightly lower than the EU average of 1.09 €-cents for double tandem connections (1.07 €-cents).

The offerings of VoIP telephony in the Greek market have not yet attracted the interest of many consumers, with operators providing VoIP telephony gaining a 2.1% market share (on the basis of volume of traffic) in December 2008 with EU average reaching 14.5%.

Regulatory issues

The final stage of the glide path for reducing fixed termination rates (FTRs) was applied as of 1 January 2009. FTRs were not to exceed 0.89 €-cents/minute. Following the 2009 cost audit of the incumbent, the termination rates have been slightly reduced to 0.81 €-cents.

€100, the percentage reaches 15%; from €100.01-€150, the percentage amounts to 18%; and from €150.01 and above, the percentage of taxes is 20%.

Broadcasting

Market situation

The main platform in Greece for the provision of broadcasting services is analogue terrestrial TV (above 99%) followed at a distance by digital terrestrial and satellite TV (8.5% and 7.8% respectively). IPTV has not seen a substantial increase in its penetration but remains at 2.0%. To date, there is no mobile TV offering.

Regulatory issues

Greece intends to move to full digital broadcasting by the end of 2012. The national law 3592/2007 on the Concentration and Authorisation of Mass Media Enterprises and Other Provisions specified a road map for the transition to digital television and describes among other things, the licensing procedures for digital terrestrial TV. Formally, the transition from analogue to digital TV started on 1 November 2008. The digital terrestrial audiovisual services of the public service broadcaster (using MPEG2) cover to date more than 70% of national population. A new entity established by the seven national terrestrial content providers started pilot broadcasting (using MPEG4) in September 2009.

In response to the provision of Law 3592/2006, EETT issued a Regulation regarding the General Authorisation terms concerning service provision of network operators transmitting broadcasting signals. It held public consultations on the definition of obligations regarding access to Application Program Interface (API) and access to Electronic Programme Guides (EPG), and concerning the 'Licensing for Installation of Transmitters, Antennas, and Auxiliary Equipment at the Antenna Parks'. The adoption of both regulations was pending at the time of drafting this report.

It is worth pointing out that so far, no analogue or digital broadcasting licenses have been formally awarded by the competent authorities, nor have the properties to be used for antenna parks been specified. Against this background, it remains to be seen whether Greece will effectively switch off analogue broadcasting by the 2012 deadline.

EETT organised an international conference regarding the digital switchover and digital dividend in February 2009, in an attempt to initiate a public dialogue on the issue.

Horizontal regulation

Spectrum management

In March 2009, EETT run a public consultation regarding the possibility to grant rights of use for radio frequencies for the provision of terrestrial wireless electronic communication services in the 2.6 GHz band. While EETT run a public consultation on the introduction of technologies other than the GSM for the 900 and 1800 MHz bands during the summer of 2008, no formal decision was taken on the issue during the reporting year.

Implementation of spectrum decisions

All of the European Commission's decisions adopted up to 2008 have been integrated into the National Frequency Allocation Table. Regarding the latest Commission Decision 2009/381/EC, amending Decision 2006/771/EC on harmonisation of the radio spectrum for

use by short-range devices, EETT was currently assessing its implementation, in particular for any competition issues.

Rights of way and facility sharing

The systematic problems with the timely licensing and installation of mobile antennas and base stations in Greece were not resolved during the reporting year. The legislation in place is still not being applied correctly by all relevant authorities. The cumbersome procedures to get a license (around 10 permits needed), which often lead to long delays (between 2-3 years to be granted a license) and strong public reaction (often people bringing down masts and antennas) were not simplified. Certain local authorities set ad-hoc conditions for the granting of the final permission needed for the installation of base stations. Fewer than 8% of the 6000 required licenses for existing and new base stations have been granted by the relevant authorities. There appears to be around 900 Court cases per year that relate to individual base stations installations. While the Government introduced legislation on standardised antenna structures, the complementary decision for applying the rules for the installation of these antenna structures was still pending. Such a situation results in an inability to deploy and maintain a proper wireless network, and renders increased operational costs for the mobile operators. This ultimately affects the quality of services offered to end-users and their right to access advanced communication services based on high-speed broadband.

The Joint Ministerial Decision setting out the framework and the procedures for granting rights of way has been awaited for several years. With the appointment of the new Government in October 2009, the process for the approval of the draft legislative act by all competent Ministries started anew. The Government's intentions are to address the issue with the revision of the electronic communications law 3431/2006. The lack of adoption of this secondary legislation hampers the deployment of fixed and wireless access networks, discourages network investments, and blocks the market from reaching its full potential.

On 30 June 2009, EETT issued a Regulation on the Right of Ways' fees and usage, which will only be enforceable after the Joint Ministerial Decision is adopted and published.

Earlier in May 2009, EETT published the 'Regulation on Collocation'. Since adherence to its provisions is not mandatory, disputes between operators were recorded. It is noted that collocation at the incumbent's local exchanges is regulated by the provisions of RUO and the relevant regulation.

THE CONSUMER INTEREST

Tariff transparency and quality of service

In August 2009, the national regulator inaugurated KOMEX (Broadband Quality Measurements Node), a new national infrastructure for measuring the qualitative characteristics of broadband connections allowing Internet users to test their connection speeds and to diagnose common problems with their network connections. KOMEX is accessible via the EETT's website.

Universal service

Following a Decision by EETT in 2008 on the determination of the performance targets in the provision of Universal Services (US), the definition of content, and shape of information to be published, a call for expression of interest was launched during the reporting year for the

provision of the whole or part(s) of the US. One enterprise expressed interest to provide the directory enquiry services and directories. Currently, there is an ongoing procedure, based on an auction mechanism, for the designation of the new US provider. EETT is also examining the terms and conditions of the auction, and is also preparing a regulation on the definition of the cost accounting principles of the US. EETT has recently initiated a public consultation procedure, regarding the Call for Tenders for the selection of the US Provider. The finalisation of the documentation for the Call for Tenders is expected within the first quarter of 2010.

Consumer complaints

In 2009, the number of consumer complaints received presented a steady decrease. This positive development can be attributed to the relevant actions undertaken by EETT (such as the issuing of the Code of Practice), to improvements in the quality of services offered by market operators and to their improved customer care and technical support services, and to the number of penalties imposed on infringed market players.

EETT introduced amendments to the Code of Practise for the provision of value added services, in particular, to the provision of premium rate SMS subscription services, relating to thorough charging information to end-users before entering to subscription services.

The Hellenic Consumer Ombudsman, in collaboration with EETT and the Cyber Crime Unit of the Hellenic Police, issued a Recommendation on providers of multimedia services and providers of call origination services in an effort to address consumers' complaints regarding unsolicited text messages and e-mails on end-users' mobile handsets.

European emergency number 112

Emergency calls are made to 112 and to other national emergency numbers (100 for the Police, 199 for the Fire Brigade, 166 for the Medical Emergency Services, and 108 for the Coast Guard). According to the Greek Ministry, calls can be handled in Greek, English and French. Indicatively, around 2 482 757 calls were made in the first 10 months of 2009. All calls are being answered in nine seconds on average. The "Pull" technique for the provision of caller location information is currently used for both fixed and mobile calls. A number of public awareness measures for the 112 emergency number were undertaken, such as television and radio spots, display on the Civil Protection Centre's vans, on bus tickets, and various governmental web sites.

Harmonised numbers for harmonised services of social value (116)

Greece has assigned the 116000 number to 'The Smile of the Child', a voluntary organisation for children. The number is operational since October 2008. The 116111 number was assigned to the Society of Psychological Education of Children and Youth, and only recently has started being operational. It should be noted that to date, this number is not yet accessible by all providers' networks and that only limited service is offered. In regards to the 116123 number, no assignment has yet taken place.

Number portability

Between 1 January to 30 September 2009, the total number of fixed ported numbers equalled to 393 226 and the total number of mobile ported number amounted to 355 484. The inter-

operator price for fixed number portability was €2.5 (among the lowest in the EU), and for mobile number portability was €9.6.

The number portability regulation mandates operators to implement number portability (both for fixed and mobile numbers) within 10 working days, giving the option of an extension by 5 working days. In practice, number portability is implemented within 12 working days on average with no retail costs for the consumers.

In June 2009, EETT ran a public consultation on reducing the 10 working days for porting a number to 3 working days. An extended deadline would be granted for requests combining number portability and unbundling of the local loop. EETT was in the process of amending the number portability regulation at the time of writing this report.

Data protection

With its ruling on 26 November 2009, the European Court of Justice condemned Greece for not transposing the Data Retention Directive.

A Joint Ministerial Decision on the minimum obligations of network operators to ensure the integrity of public telephony networks and the availability of public telephony services at fixed location is still pending. According to the Ministry, the draft law was expected to be put before the Greek Parliament for adoption in due course.

In an effort to combat terrorism, the Greek government adopted in August 2009 the national legislation 3783/2009 on the identification of users (natural persons and legal entities) of mobile telephony equipment and services. Subscribers not providing correct details are subject to criminal liability. The transitional provisions allow mobile operators to record the personal data of all pre-paid mobile telephony users until 30 July 2010, after which any anonymous SIM cards will be blocked. Mobile operators foresee a decrease in the number of pre-paid cards users, and an increase in their operational costs due to the re-organisation of their network chain outlets where pre-paid cards now can be bought.

HUNGARY

INTRODUCTION

The Hungarian electronic communications sector is performing better than the overall trends of the Hungarian economy, although the growth of recent years have diminished; in particular mobile broadband services are showing signs of steady growth. In Hungary the electronic communications market is characterised by infrastructure based competition as, during the past years, cable operators have been increasing their market share in the broadband market significantly with bundled offers including TV services becoming more popular.

While the National Communications Authority (Nemzeti Hírközlési Hatóság, NHH) has taken steps to define a strategy towards next generation networks (NGN), the timely adoption of this strategy is of importance in order to promote legal certainty and to meet current demands of the sector. Despite regulatory actions in the past, the take up of local loop unbundling (LLU) remains low and the current preparatory regulatory activities with regard to next generation networks (NGN) should aim at giving appropriate incentives for operators to invest in network deployment. Apart from measures taken with regard to consumer protection, further regulatory measures are necessary in order to handle bottlenecks of competition

REGULATORY ENVIRONMENT

Main regulatory developments

Following the legislative amendments in relation to consumer protection during 2008, the protection of consumer rights was one of the main activities of the National Communications Authority in Hungary during 2009. It examined consumer complains, increased its efforts to ensure tariff transparency for consumers and initiated proceedings against several operators, in particular with regard to the quality of service provided.

On 22 October 2008 the NHH launched tenders to assign further frequencies. The most significant tender concerned a 900/1800/2100 MHz frequency package to enable entry of a fourth operator. The tender for allowing the entry of the fourth mobile operator was however cancelled in 2009, that the NRA justified by changes in the business environment caused by the global economic crisis. The other tenders concerned a 450 MHz frequency band and 26 GHz band for further mobile infrastructure development.

Having finalised the second round of market analysis in 2008, the NHH is carrying out preparatory work on the third round of market reviews. Consultation with the sector on draft measures is expected to take place in early 2010. The NHH has been reflecting particularly on the regulatory approach towards broadband access, in view of maintaining infrastructure based competition in Hungary. However, no indications have been given in relation to the possible regulatory approaches towards broadband and, more particularly, in respect of the regulatory treatment of next generation access networks (NGA). Market players are concerned about the lack of transparency and legal certainty in this respect. It is necessary that the NHH adopts a more proactive approach and gives indications to the sector in respect of these issues in order to promote investment and preserve competition in the broadband markets.

Act LVI of 2009 aiming to implement Directive 2006/123/EC on services in the internal market[154] modified the Act on the electronic communications to ensure compliance with the RTTE Directive[155]. Act LXXXVI of 2009[156] amended the Act on electronic communication to allow intermediation by telecommunications operators with regard to payment services.

Organisation of the NRA

The regulatory tasks are divided between the NHH and the Ministry of Transport, Telecommunication and Energy ("Ministry") and the Prime Minister's Office ("PMO"). The Ministry has seen serious manpower cuts during the last years, and in 2008 the bulk of activities related to the electronic communications sector[157] were finally moved to the PMO. Operators are concerned about the lack of clear strategic and long-term vision for the Hungarian electronic communications sector, and they regret that the institutional setup makes it difficult to enter into dialogue with the decision makers.

Since the latest reorganisation of the Ministry, the NHH plays a greater role in general policymaking and in spectrum policy, as the supervision of the NRA and the policy making belong to two different ministries. In 2009, a restructuring of the board has occurred, whereby three new members were designated to the board and three existing members were reappointed, although in May 2009 one of the confirmed members was dismissed after disciplinary proceedings. In December 2009, the president announced his early resignation.

Decision-making

Although the NHH has been preparing for the third round of market analysis, no new draft decision has been published for consultation. Draft measures are expected to be published and consulted in 2010.

Despite actions taken by the NRA concerning regular consultations and public hearings with operators, market players still consider that further measures of transparency are necessary. They are concerned about the lack of dialogue in particular during the public hearings, which they currently regard as a formal step rather than a constructive exchange of views.

With regard to appeals, some market players are also concerned of the lengthy court proceedings and, that the courts often take decisions on the basis of procedural issues rather than on the merits of the case.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Hungarian electronic communications sector in 2008 was around €3.98 billion, which represented around 3.8% of the gross domestic product in 2008 and

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154 Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market, OJ L 376, 27.12.2006, p. 36–68

155 Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity, OJ L 91, 7.4.1999, p. 10–28

156 Act LXXXVI of 2009 amending the Act CXII. Of 1996 on Financial institutions and financial undertakings with regard to payment institutions and payment services (2009. évi LXXXVI. törvény a hitelintézetekről és a pénzügyi vállalkozásokról szóló 1996. évi CXII. törvény pénzforgalmi intézményekkel és pénzforgalmi szolgáltatással összefüggő módosításáról)

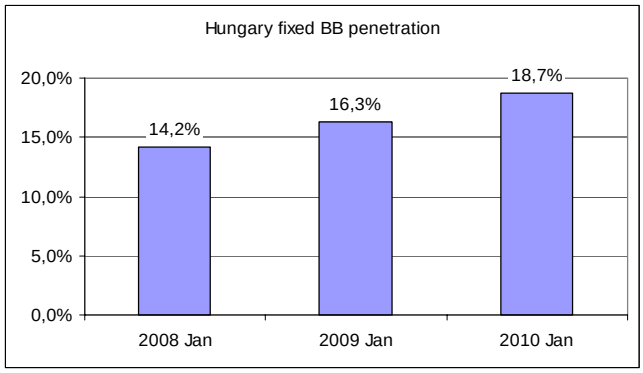
157 With the exception of the supervision of the NHH and the functioning of the Universal Services Fund.

shows a nearly 4.0% increase to 2007, with revenue from the fixed markets (including broadband and leased lines) amounting to € 2.04 billion and revenue from the mobile markets totalling € 1.94 billion (showing a moderate decrease that is covered by the different exchange rate used in the current report). The total value of tangible investment in electronic communications networks during 2008 was €645.7 million, while mobile operators invested around €237.6 million.

Market players are of the view that given the take-up of triple play and mobile broadband services as well as the increasing competition by cable television operators, the strategy on Next Generation Access and the assessment of the competitive impacts of cable infrastructure remain the major regulatory challenge in Hungary. As the regulatory treatment of NGAs will affect operators' business strategies, it is important not to delay the process.

Broadband

Market situation



Broadband penetration increased to 18.7% in January 2010 (16.3% in January 2009), but remains below the EU average of 24.8%. Out of 1 879 181 active retail broadband lines in January 2010, 823 275 were DSL retail lines (43.8%). Of all DSL lines, the main incumbent operator has slightly increased its market share over the last year, from 72.3% in January 2009 to 76.6% in January 2010.

However, taking into account other technologies, the market share of the broadband lines based on DSL is decreasing in Hungary. In January 2010 56.2% of broadband lines were provided by other technologies (mainly cable but also other technologies such as mobile broadband and fixed wireless technologies) compared with 50.8% in January 2009 and 38.3% in January 2007. Consequently, the market share of the main incumbent operator has been decreasing in the overall retail broadband market and in January 2010 it stood at 40.6% compared with 41.7% year before. These developments evidence the strong growth of cable operators in Hungary.

In this respect, in the past few years, the incumbent has been facing an increasing competition on behalf of cable operators providing advantageous broadband offers with triple play packages. Although the cable market is fragmented, there are strong market players which are already upgrading their networks towards NGAs in their areas of service (DOCSIS 3.0), and gaining market shares from the incumbent operator.

Both cable and DSL operators offer triple play services. Cable television is the main driver of competition at present in the broadband market, hence it is necessary for DSL operators to offer an IPTV product to be in a position to compete with cable operators. Two incumbent operators are offering an IPTV resale product on a commercial basis.

The main fixed incumbent operator announced in June 2008 that it would invest €166 million in fibre and cable networks by 2013 with the aim to offer fibre-to-the-home (FTTH) to 780 000 households and upgrading lines to serve a further 380 000 households. In April 2009 the

incumbent was gradually starting to offer FTTH packages in more populated areas of larger cities in Hungary and is expecting to reach 160 000 households by the end of 2009 using GPON architecture. Other fixed operators did not announce any plans on the upgrade of their infrastructure.

In Hungary mobile broadband penetration was 3.8% in July 2009, just below the EU average of 4.2%[158] and is showing continuous signs of growth. Mobile broadband generated the strongest growth in the mobile market, and in 2009, the NHH started to publish data on mobile internet services. According to the monthly mobile broadband report of December 2009, the incumbent's subsidiary dispose over roughly half of the market, leaving the other half of the market divided almost evenly between its two competitors.

Regulatory issues

It is considered, that the strategy on NGN as well as the regulatory treatment of cable remain the major regulatory challenges in Hungary, given the growth of bundled offers and the increasing infrastructure based competition. The NHH organised a public consultation on a strategic study on NGN and also held a public hearing on 31 October 2008. Despite these activities, operators expressed their concern that, the regulator has not yet provided a comprehensive and clear strategy on this matter, that would ensure legal certainty to the market and give the incumbent as well as alternative operators the necessary incentives to invest.

During 2009 the NHH has been working towards a revision of the current broadband regulation, however no public consultation has taken place yet on this measure in 2009, the NRA expects to conduct a public consultation in the beginning of 2010. According to the NRA, the current challenge is to factor appropriately the competitive pressure exerted by cable operators in the wholesale broadband access market while preserving competition. In this context, the NHH stated to reflect on some form of geographic or product differentiation.

A new wholesale broadband access reference offer (BARO) was under preparation and consultation with stakeholders took place during 2009. Furthermore, the NRA concluded that the incumbent operator had failed to comply with the retail minus pricing obligation in the wholesale broadband access market.

As regards the wholesale physical infrastructure (LLU) market, in the second round market review in 2007, the main incumbent and 4 regional fixed operators were designated as having SMP and, accordingly, obligations were imposed on them. The Hungarian monthly price per fully unbundled local loop stood at €6.97 in October 2009, below the EU average (€8.55) and for shared access (€1.52) it is slightly below the EU average (€2.24). In this respect, it is worth noting that local loop unbundling started to show some signs of growth in Hungary only in 2006 and take-up still remained quite low in 2009, despite the regulatory intervention to substantially reduce LLU prices. At present stage, uncertainties as to LLU investments with regard to next generation access network deployment may also be reducing the incentives for alternative operators to invest.

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158 At the time of preparing this report, data on mobile penetration in January 2010 were not available for Hungary.

In March 2009 following the merger of certain operators, the NRA adopted its decision on the reference unbundling offer and reference interconnection offer, for the operators designated as having significant market power.

In 2008 the main incumbent merged with its own cable operator company and intended to acquire sole control over a regional cable TV operator. The National Competition Authority came to the conclusion that the acquisition would reduce the only competitive pressure on the incumbent, and therefore it prohibited the acquisition. In August 2009, the incumbent acquired infrastructure from cable operators in the region around the capital offering double and triple play packages to subscribers.

In 2009, the PMO initiated consultations on a Digital Public Utility Project that would involve public and governmental infrastructure to improve access to regions where NGA networks would not be provided on commercial terms. Some operators pointed out that public intervention should not distort competition and be limited to the above areas.

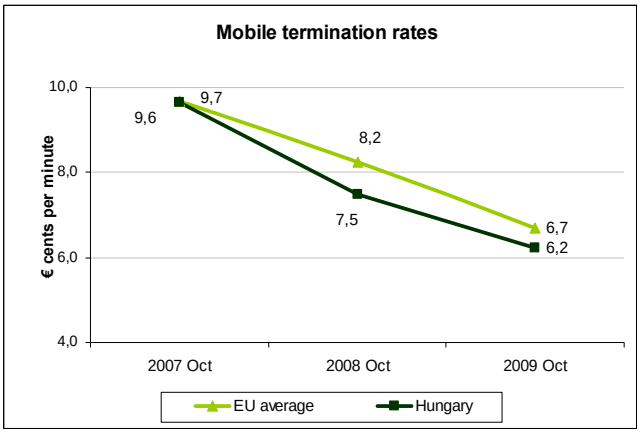
Mobile

Market situation

In Hungary there are three MNOs - the mobile division of the main incumbent and two Hungarian subsidiaries of foreign MNOs. In October 2009, the three MNOs market shares did not show a significant departure from the 2008 figures. Mobile penetration rate was 106.2% with 10 654 339 subscribers in October 2009 showing a moderate increase compared to October 2008 (104.4%). The number of pre-paid subscriptions decreased during 2009 (58.1 % in October 2009), but remained slightly above EU average (55.3%).

Over the past years, some fixed operators have voiced concerns as to the lack of mobile virtual network operators (MVNO) in Hungary and the difficulty to conclude negotiations with one of the MNOs in this respect. However, in November 2009 a new entrant announced to enter the mobile market after concluding an agreement with the third largest MNO for using its network to offer the most common mobile services focusing on voice call and SMS services.

Regulatory issues



In order to boost competition on the mobile market, a tender for a licence covering the 900/1800/2100 MHz frequency package has been published to enable market entrance for a fourth MNO. However, this tendering process was subject to notable controversy at national level, and in May 2009, the NRA decided to bring to a close the tender for this frequency package without evaluating the bids. Three of the applicants appealed the decision of the NRA at second instance (to the president of the NHH) and these appeals were rejected. Furthermore, two participants submitted an appeal for review to the Metropolitan Court, which delivered a final judgement dismissing the case in July 2009.

On the basis of the regulatory measures in place in the mobile call termination markets, the MNOs are required to gradually decrease their mobile termination rates (MTRs) following a glide path with cost-oriented MTRs; symmetry between the operators was achieved from 1 January 2009 (at HUF 16.84 /min, approx. 6.23 €-cents/min). The level of MTRs in October 2009 was 6.23 €-cents, just below the EU average of 6.70 €-cents. The glide path is based on a bottom-up LRIC model. The reductions at wholesale level also contributed to the reduction of the retail average mobile price per minute (€0.14), which is slightly above the EU average (€0.13).However, the average revenue per mobile user has decreased significantly over 2009 (from €226 in December 2007, to €188 in December 2008), which may be explained by lower usage due to the economic situation.

Roaming Regulation

In accordance with the amended Roaming Regulation, as of 1 July 2009, operators adapted their prices for calls made and received to the new Eurotariffs and lowered their tariffs for sending SMSs. However, due to exchange rate fluctuations and increase in VAT, the reductions on the Eurotariff established in the Roaming Regulation were outbalanced and prices in compliance with the cap led to an increase of the retail prices. On the other hand, Euro-SMS prices are lower than some rates for sending SMSs on the domestic network. The newly introduced wholesale caps on data roaming apparently did not significantly influence retail prices yet, however some new data roaming packages were introduced.

Fixed

Market situation

Following a continued consolidation process, there are currently three local telecommunications operators in Hungary and the third largest has been taken over by a cable operator. In 2008, the second largest fixed operator incorporating also the largest carrier selection provider was put on the market for sale and in November 2009 was sold to financial investors.

As regards telephone services, the three regional fixed operators still hold a strong market position in their respective territories. On the basis of call traffic, in 2008 the operators had 84.4% market share for all types of fixed calls (83.6% in 2007) as well as 82.6% and 76.9% market shares respectively for calls to mobile and international calls. The market share of fixed operators for international calls on the basis of outgoing minutes of communications increased significantly during 2008, from 66.6% to 76.9%. Despite the regulatory obligations in place, competition in the retail calls market in Hungary has not developed significantly, and the use of carrier selection and carrier pre-selection continues to decline. However, with the increase of cable telephony, competition in the retail calls market in Hungary may introduce signs of development.

Regulatory issues

The main incumbent's wholesale price for making and terminating local calls during peak time in October 2009 was 0.51 €-cents just below the EU average (0.52 €-cents). In the second round market review of the call termination market, NHH imposed asymmetric remedies on local incumbents and on alternative operators, *inter alia* imposing access, price control and accounting separation obligations only to the regional fixed operators but not to the alternative operators. Following the reductions in interconnection fees of last year, charges

for call termination on the incumbents` fixed network on single transit were 0.65 €-cents in October 2009 (down from 0.68 €-cents in October 2008) which values are also below the EU average of 0.79 €-cents. The NRA reported that a new market analysis decision is under preparation which is expected to address the current asymmetry of the fixed termination rates.

In May 2009, the NHH initiated a consultation with regard to the restructuring of the Hungarian numbering plan. The aim of this new scheme is to promote convergence with mobile numbers and allow mobile-fixed number portability.

Broadcasting

Market situation

In Hungary broadcasting transmission services are provided via several platforms: analogue terrestrial (26.3% of households), cable (57.0% of households), satellite (19.0% of households), IPTV (1.4% of households) and Terrestrial Digital Video Broadcasting (DVB-T).

The geographic coverage of analogue terrestrial transmission is approximately 90% of the Hungarian territory. The Hungarian cable TV market is still very fragmented with several hundred service providers, although the two biggest operators cover almost half of the total cable subscriptions. Satellite broadcasting subscriber services are provided by four operators.

With the entry into force of the Act on digital switchover, the complete analogue switch-off must take place by 31 December 2011 following a gradual switch-off of the analogue transmitters. The provision of national digital terrestrial TV broadcasting (based on 3 multiplexes) started in December 2008.

Mobile television services (Digital Video Broadcasting – Handheld, DVB-H) were launched in 2008, however take up is not yet significant.

Regulatory issues

On 22 October 2009, the digital terrestrial television provider was fined to 40 million HUF (about €150 000) by the NHH for being in delay with the implementation of the digital switchover. Being the single company entrusted with the carrying out of the digital switchover, the company was required to provide access to digital broadcasting to 88% of the population in 2009, and to 94% by 31 December 2010. The NRA carried out during 2009 the first Digital Monitoring report and it concluded that the company had met only partially and with delay its obligations with regard to availability of service and provision of information.

During 2009 the NHH conducted a sector specific inquiry on Broadcasting where it highlighted anomalies with regard to the reluctance of television channels (in particular the two main national commercial channels) to enter into contract with the digital terrestrial TV provider. Furthermore it proposed amendments to the Media Act to liberalise channel ownership. In its report, the NHH established that the increasing competition between platforms might be hindered by the delay in the DVB-T deployment. However the NHH considers the existing measures sufficient to enforce the obligations of the Digital Switchover Act on the digital terrestrial TV provider.

In October 2009, the Radio and Television Commission decided to discontinue the licences of two national radio stations and granted these rights to two new entrants offering the highest

percentage of revenue as payable fee. The decision raised concerns, and was followed by the resignation of the president of the Radio and Television Commission.

The tendering of local and regional digital terrestrial TV broadcasting rights is currently under preparation by the NRA, which intends to hold an extensive public hearing in the coming months.

Horizontal regulation

Spectrum management

In May 2009, the NHH released the final results regarding the frequency tender published in October 2008 on the frequency blocks which had not been cancelled. With regard to the 450 MHz band, none of the applicants was selected. The NRA considered that the business plans submitted by the bidders were not sufficiently solid in view of the implementation of the objectives expressed and anticipated in the tender, including a growth in the vitality of the market. Both the incumbent operator and the provider of the digital terrestrial broadcasting network were awarded frequencies in the 26 GHz band for a period of ten years, and they can already start to operate in this band.

The authorities reported that internal preparations for the implementation of the GSM Directive had been initiated, a committee led by the PMO have been set up to develop a concept for the implementation and a meeting with the stakeholders on the strategy and possible next steps will be organised in the coming months. According to the concession agreements, operators are not currently allowed to provide UMTS services on the 900 MHz frequency band. Operators consider that it is necessary that the authorities adopt a decision which would expressly modify the concession agreements permitting the use of the frequency band for UMTS as well, which would provide legal certainty. However, it was also considered that the amount of frequencies that each mobile operator holds in this frequency band would not be technically sufficient to enable them to provide both GSM and UMTS services.

The debate on the future use of the digital dividend frequency band in Hungary has not yet started and the authorities mentioned that the need to coordinate with neighbouring countries was particularly challenging in Hungary, given the fact that some of these neighbouring countries are not members of the EU.

As some mobile network operators do not dispose over sufficient frequencies to provide both voice and data services and the digital dividend is still reserved for broadcasting, there is a considerable demand for future frequency acquisitions.

Implementation of spectrum decisions

In 2009, modifications of the Frequency Plan have been under preparation in order to implement the Commission Decisions pursuant to the Radio Spectrum Decisions. The Commission asked further clarifications on the implementation of Commission Decisions 2008/477/EC and 2008/411/EC. The Commission services are following up the matter.

Rights of way and facility sharing

As in the previous year, operators expressed their concerns regarding the increasing difficulties they have encountered, resulting from the municipalities' refusal to install masts and antennas.

Administrative charges

The Act on Electronic Communication limits the administrative fee at 0.35% of the operators' previous year's annual net revenue derived from e-communications services. The exact rate is established by the Minister each year, but has remained at 0.212% since last year. Some operators have expressed concerns in relation to the level of the administrative fee, since the percentage of 0.212 has remained stable despite significant growth of the sector over the last years. In their view, this has progressively increased the budget of the NRA over the past years and necessary adjustments need to be looked into.

As in previous years, mobile operators expressed their concerns as to the structure of the frequency fees in Hungary, which in their view results in a payable amount which significantly exceeds the frequency fees paid in other EU countries and which create disincentives to an efficient use of the frequencies. During 2008, a modification of the calculation system was introduced reducing the frequency fee by 33% for UMTS. Despite this reduction, operators still consider that the amount and structure of the fees are exceptionally high and may negatively influence the deployment of future infrastructures. The Ministry declared that it is currently reflecting on possible modifications to the system of frequency fees in Hungary.

THE CONSUMER INTEREST

Tariff transparency and quality of service

In 2008, the Governmental Decree 229/2008[159] established quality service parameters of electronic communication service providers such as the downloading and uploading speed. As part of an intensified monitoring process, NHH fined two cable operators in October 2009 for failure to specify the guaranteed download and upload speed in their advertisements. In November 2009, the Competition Authority fined two mobile network operators with 10 and 15 Million HUF (about €37 000 and €55 500), respectively, for advertising their mobile broadband packages as unlimited with regard data volume, while in fact limiting the traffic speed when the monthly consumption surpassed a certain amount or the network capacity failed to meet the demands. In June 2009, the incumbent provider has been fined with 100 Million HUF (about €370 000) by NHH for excessive penalties to customers modifying or cancelling fixed-term contracts.

Universal service

In April 2004 each of the five (currently three) incumbents was designated as a universal service provider (USP) for a period of four years and since then they have been providing the

[159] Government Decree 229/2008. (IX. 12.) Korm. on the requirements related to the quality of electronic communications services in relation to the protection of consumers (229/2008. (IX. 12.) Kormányrendelet az elektronikus hírközlési szolgáltatás minőségének a fogyasztók védelmével összefüggő követelményeiről)

four components of universal service in their respective geographic areas. Whilst the possibility for USPs to benefit from the Universal Electronic Communications Support Fund is provided in the legal framework, so far the USPs' compensation requests were refused as net avoidable costs were not demonstrated. By December 2008 new agreements for the extension of the universal service contracts had not been reached and in consequence, the universal service provision was extended by a legislative modification of 31 December 2008[160] for at least one more year with the same components and conditions as the previous four years.

The new contracts for extending or renewing the universal service provision were still being negotiated. No change on the scope of the universal service is expected, however the possibility of reducing the number of public payphones required has been introduced[161]. It has been indicated that in the first quarter of 2010, these contracts will probably be concluded for a period of two years, in order to be in line with the newly adopted regulatory framework.

One of the mobile network operators contested the system of compensation for the universal service since its creation, and in July 2009, the Hungarian court referred the case to the European Court of Justice. In September 2009, the Court held in the case C-143/09, that the rules of the Universal Services Directive are not applicable to the calculation of contributions for the activities preceeding the entry into force of the Directive in Hungary (the accession of Hungary), even if the administrative procedure started after the accession.

Users' access to the Internet and network management

Net neutrality was not reported to be an issue at the moment in Hungary. Mobile network operators declared that they do not currently have a policy of blocking VoIP traffic. However they also expressed that in view of the future developments of VoIP, operators may need to reflect on alternative policies for VoIP access.

Number portability

Between January 2004 and October 2009 altogether 438 273 fixed numbers were ported in Hungary. Mobile number portability is still not significant in Hungary: between May 2004 and October 2009 a total of 289 849 mobile numbers were ported, representing 2.7% of the total number of mobile subscribers. Whilst the maximum time permitted for fixed and mobile number portability is 8 working days, it takes on average 6 working days to port a number.

Consumer complaints

Following the legal developments in 2008, several consumer protection measures were taken in Hungary throughout 2009. In particular the NRA has focused on improving consumer awareness, and as such has continuously updated the IT application of tariff comparison and optimal tariff selection available on NHH web page, has provided up to date information on

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160 Government Decree 352/2008 (XII. 31.). amending Government Decree No. 134/2004. (IV. 29.) on the Detailed Rules Applicable to the Operation, Supervision, Use, Termination and Sources of the Universal Electronic Communications Subsidy Fund (352/2008. (XII. 31.) Korm. r. Az Egyetemes Elektronikus Hírközlési Támogatási Kassza működésére, felügyeletére, felhasználására, megszüntetésére és forrásaira vonatkozó részletes szabályokról szóló 134/2004. (IV. 29.) Korm. rendelet módosításáról)

161 Article 18 of Act CLI of 2009 amending act LXXVIII of 2005 on the organisation, duties and competences of the National Attestation Body.

the roaming regulation and regularly updated interactive map on the risk of inadvertent roaming and has established regular co-operation with other consumer protection organisations in Hungary. The main areas of complaints in 2009 covered billing (overcharging), subscriber contract (misuse of provider's power at contract termination) and service quality.

In a legal dispute between a MNO and a consumer, that was referred to the European Court of Justice[162], it was ruled that the standard contractual terms and conditions of one of the Hungarian mobile network operators were unfair, insofar as they conferred exclusive jurisdiction to the court in the territorial jurisdiction where the mobile operator has his principal place of business.

European emergency number 112

According to the recent Eurobarometer survey[163], there has been a significant increase on the number of respondents who now know 112 as the European emergency number in Hungary from 27% in 2009 to 32% in 2010. One in five Hungarians (20%) had received information about 112 in the last 12 months and a relatively high percentage of them (29%) had received the information from an electronic communications provider.

As indicated in the previous report, the Ministerial Decree 23/2007[164], which introduced a push system for making caller location information available for 112 calls in Hungary, entered into force on 1 December 2008. The Decree provided that as of 1 December 2008 a push system would apply with regard to 112 caller location information. However, technical preparatory work only started in 2009 and a pull system is still applied. While the mobile operators declared to be in a position to provide the caller location information on a push basis, the authorities reported to be still working towards implementing the technical capacity to apply such a push system, which is currently working at prototype level. The Commission services are following the issue and encourage the authorities to take measures to advance with the process.

E-Privacy

On 15 March 2008, the legislative act[165] transposing the Data Retention Directive entered into force, however in spring 2008, the implementing legislation was challenged before the Constitutional Court, and the case is still pending.

With regard to registration of prepaid subscribers, Section 129 (6) b) of the Act on Electronic Communications requires that individual subscriber contracts shall indicate the name, address, place of abode, or registered office of the subscriber. According to the NRA this requirement also covers the prepaid contracts

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162 Case C-243/08

163 Eurobarometer Flash survey on the European emergency number 112 (February 2010)

164 Decree No 23/2007. (II. 23.) GKM of the Minister of Economy and Transport on the technical requirements for the public telephone network in order to support emergency calls to the single European emergency call number, (23/2007. (II. 23.) GKM rendelet az egységes európai segélyhívószámra irányuló segélyhívások támogatása érdekében a nyilvános telefonhálózatra vonatkozó műszaki követelményekről)

165 Act CLXXIV of 2007 amending Act C of 2003 on Electronic Communications (2007. évi CLXXIV törvény az elektronikus hírközlésről szóló 2003. évi C. törvény módosításáról.

IRELAND

INTRODUCTION

The economic environment in Ireland is challenging as illustrated by the rapid fall in GNP and in consumer prices. Consumers are increasingly cost-conscious and are demanding value for money. The potential for sustainable infrastructure-based competition in the Irish market is beginning to be realised, driven by demand for converged services, some consolidation and the increasing importance of cable as an alternative competitive platform in urban areas. Mobile players are adding fixed line voice and broadband services to their portfolios. Fixed traffic and revenues continue to decline. Ireland still ranks below the EU average on fixed broadband penetration although mobile broadband continues to grow strongly. Furthermore, there is a need to ensure that targeted performance levels for universal services are met.

In general, while some important decisions were taken during the year, significant effort has been devoted to preparatory work on key issues which have not yet come to fruition. There is uncertainty regarding future investment in Next Generation Networks (NGN) although there seems to be some interest among market players in collaborative approaches. The Government and ComReg have published reports outlining respectively a general strategy for NGN and principles for an approach to NGN regulation. Major decisions are pending on spectrum refarming which were also flagged in last year's report although ComReg is engaging in a thorough consultation process and has recently published a response and consultation which outlines a way forward. The future use of the Digital Dividend in Ireland is also currently one of the major regulatory issues at stake. It is necessary that the debate and the decision making process on this issue are advanced as soon as possible.

Some market players also voiced concerns about ComReg's implementation and enforcement capabilities. In that context ComReg has recently launched a new consultation on its dispute resolution procedures.

While acknowledging the need for regulatory independence, the Irish government has recently published a statement of regulatory principles (directed at all economic regulators) which could have implications for ComReg's operations.

REGULATORY ENVIRONMENT

Main regulatory developments

Following a consultation process launched in 2008, in June of 2009 the Irish government published a report on Next Generation Broadband. The strategy as outlined in the Report consists of promoting private sector investment, ensuring optimal regulation, an innovative spectrum policy and targeted government action. ComReg followed this report with a discussion document launched in July 2009 and a subsequent follow-up report published in November 2009 which focused on the role of regulation in next generation broadband development.

There were a number of important developments concerning spectrum in the course of the year. In particular ComReg issued a consultation paper and report on the use of the digital dividend which is seen as a first step in this process. While stating that 2012 is the target date

for digital switchover, the Irish government has yet to confirm that the switchover will be complete by that stage.

In relation to proposals for liberalisation of the future use of the 900 MHz and 1800 MHz ("GSM") spectrum which was flagged in last year's report, ComReg has conducted a lengthy and thorough consultation process in which a set of refined proposals have been suggested.

Organisation of the NRA

The Irish government has proposed legislation to regulate premium rate services in Ireland. The proposed legislation establishes a regime for consumer protection for subscribers to premium rate services. It replaces the existing industry model of self-regulation and transfers the regulatory functions to ComReg. It is expected to be passed into legislation shortly.

The replacement of the Electronic Communications Appeals Panel with the possibility of appeal to the High Court in 2007 appears to be working well and has been welcomed by most players. Since the beginning of 2009, five appeals have been lodged by the incumbent against ComReg decisions. To date all except one of these has been settled.

In October 2009 the Irish government issued a Statement on Economic Regulation which has implications for a number of regulatory agencies in Ireland including ComReg. This Statement covers governance and accountability arrangements, structures and mandates as well as costs and efficiencies in regulatory agencies. The Statement was issued in the context of a government commitment to initiate a review of economic regulation in Ireland and takes into account the challenging economic environment in which such agencies now operate. While the Statement acknowledges the need for independent regulation it nevertheless includes provision for Ministerial policy directions as well as resourcing and budgetary constraints. The Commission will monitor developments in this area.

Decision-making

ComReg published a draft decision and consultation on 23 December 2008 for the physical network infrastructure access (LLU) market 4. In the Commission's subsequent comments, whilst noting that the regulatory outcome was not affected, it invited ComReg to include also alternative operators' fibre in this market. ComReg issued a further consultation on this matter on 15 May 2009.

ComReg has taken a number of important decisions on retail bundled offers and on pricing for unbundling of the local loop which should have significant implications for the future. If implemented as proposed, these decisions will mean significant reductions in prices.

As noted in last year's report, ComReg continues to find it challenging to observe the target time frame of four months for resolving disputes. For example, industry players have cited examples of disputes relating to Ethernet access, mobile termination rates and LLU collocation which have taken more than one year to resolve. ComReg acknowledges some of these difficulties and has recently launched a public consultation on the dispute settlement process. Some market players complain that ComReg is slow to reach final decisions even following lengthy consultation processes. On the other hand ComReg is conscious of the need for careful analysis and full transparency in its decision making. Furthermore ComReg has also carried out and closed a number of investigations. Some market players expressed positive views on ComReg's recent performance in relation to ensuring the compliance of the

SMP operator with its regulatory obligation not to unreasonably bundle retail fixed narrowband access.

ComReg's has not initiated any competition cases using its powers to investigate breaches of competition law in the electronic communications sector, established in 2007 through the amendment of the Competition Act 2002.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Irish telecommunications sector declined slightly and was €4.3 billion as of 31 December 2008, compared to €4.4 billion one year earlier. The fixed segment contributed €2.3 billion, a drop of 1.8% on 2007 while the mobile segment was slightly up at €2.1 billion. Investments in telecommunications networks rose and reached an estimated €516 million at the end of 2008 compared to €458 million in 2007. The increase was largely accounted for by fixed incumbent investment while investment by the mobile sector declined by around 5%. The investment over revenues ratio is 11.9% which is below the EU average and significantly below the best performing countries[166].

BT and Vodafone have recently announced an agreement whereby BT will hand over its consumer and SME broadband retail services to Vodafone which will in turn purchase certain wholesale services from BT over the next seven years. Consultations are ongoing with Singapore Technologies Telemedia who have recently acquired a significant shareholding in the Incumbent operator.

According to operators, the current economic climate is creating uncertainty around future investment in next generation networks. In July the Department of Communications, Energy and Natural Resources' (DCENR) issued a policy paper "Next Generation Broadband: Gateway to a Knowledge Ireland" which identified high speed broadband services as being critical in attaining the Government's twin goals of becoming a 'Smart Economy' and a 'Knowledge Society'. ComReg quickly followed with a 'Discussion paper' of its own on the issue of promoting the timely and efficient development of high speed broadband infrastructure and services.

ComReg expects that NGN networks will start roll-out in certain areas next year, and that competition will continue to be important in driving further development. It is considered unlikely that competition alone would, in the short term, provide sufficient impetus to bring about a very extensive rollout of NGN networks across the country. In the context of the investment risks associated with NGN, there also appears to be an appetite amongst a number of stakeholders for the adoption of a collaborative industry approach. ComReg has indicated that it is prepared to engage with stakeholders to explore the likely regulatory framework that could apply in such circumstances, particularly having regard to the need to satisfy competition concerns and having due regard to any relevant EC legislation and recommendations.

During the year there were legal proceedings between ComReg and the incumbent operator in relation to compliance with its obligation not to unreasonably bundle retail narrowband access. In October 2009 ComReg announced that these matters have been settled and the following approach in relation to bundles that include retail line rental should be taken:

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166 Investment data for alternative operators may be underestimated as not all operators submitted data.

1. Bundles will be assessed by reference to the Net Revenue Test using average total cost;

2. The incumbent is not to launch bundles which include retail line rental without ComReg's prior approval;

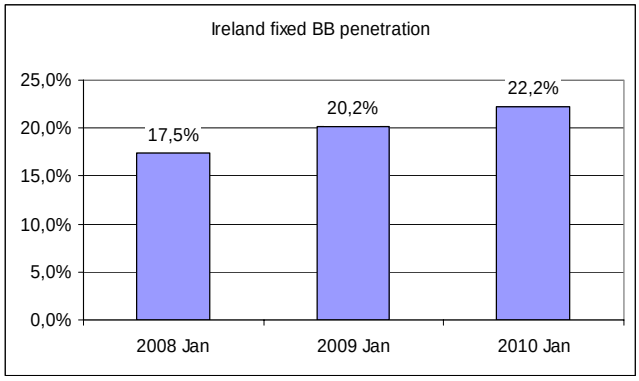
3. If there are any bundles in the market that include retail line rental that have been cleared by ComReg, which ComReg subsequently determines do not pass the Net Revenue Test, the incumbent will modify or withdraw such bundles;

4. ComReg has agreed to conduct a consultation in relation to a further specification of the existing obligation not to unreasonably bundle.

Over 13% of the Irish population subscribed to bundled offers (over 90% of these for "double play") of electronic communications services in 2008.

Broadband

Market situation



In January 2010, fixed broadband penetration reached approximately 22.2% compared to around 20.2% in January 2009, while the EU average stood at 24.8%. Although fixed broadband penetration has increased, the gap between Ireland's penetration rate and the EU average is around the same as last year. Ireland has performed better on mobile broadband where penetration now stands at 10.5% of the population compared to the EU average of 5.2%. The incumbent's broadband market share is approximately 51% which represents only a slight reduction on 51.6% in January 2009 and compares to an EU average for incumbent market share of 45%.

Broadband speeds are relatively slow in Ireland compared to other Member States. For example, 31% of broadband lines are between 144 Kbps and 2Mbps compared to the EU average for this category of 16.2%. Only 8.9% of broadband lines are above 10Mbps compared to the EU average of 23.2%.

The share of non-DSL broadband lines has increased with most of the growth coming from cable broadband which showed an increase of 56% on last year. Wireless local loops (WLL) have declined slightly. DSL accounts for 72% of broadband lines in Ireland and the incumbent operator holds a 69% market share which compares with an EU average incumbent market share for DSL of just below 56%.

Following the conclusion of a technology neutral competitive tendering process, the contract to implement and operate the National Broadband Scheme (NBS) was entered into by the Department of Communications, Energy and Natural Resources with a mobile wireless broadband operator at end December 2008. This scheme is part funded by the European Regional Development Fund. Progress under the NBS appears to be on track for delivering broadband to certain target areas in Ireland in which broadband services were deemed to be insufficient (estimated at 10% of the population). In order to facilitate competition in the area,

the contractor is required to provide wholesale access to any other authorised operator who wishes to serve premises in the NBS area. It is expected that broadband services will be deployed in all NBS areas within 22 months of the signing of the contract.

Regulatory issues

The number of fully unbundled lines dropped slightly during the year however there was a significant increase of over 19% in the number of shared access lines. In general however the numbers of unbundled lines (shared and full) are significantly below the EU average. For full LLU 7.4% of new entrants DSL lines are unbundled compared to 58.5% in the EU and for Line Share the figure is 2.9% compared to 15.2% at EU level. Although declining slightly, bitstream is by far the most common form of access at 89.8% of lines compared to 15.9% at EU level.

ComReg had published a Draft Decision and consultation for physical network infrastructure access (LLU) market on 23 December 2008. The Product market included copper and fibre. It was proposed to designate the incumbent operator with SMP since it had 100% market share and there were, amongst other things, high barriers to entry. It was also proposed to impose the full suite of remedies for copper lines. In addition remedies are to be imposed 'in principle' for next generation networks with further consultation on the specifics to be held. The Commission invited ComReg to include alternative operators' fibre in its market definition but noted that this had no impact on SMP. A further consultation on the inclusion of alternative operator fibre was published on 15 May 2009 and ComReg is now considering responses to both of the above consultations before taking a final decision.

ComReg took a number of highly significant steps in the area of pricing for LLU during the year. In a consultation ComReg proposed that the monthly full LLU rental price be reduced from €16.43 to €12.18 and the monthly SLU charge from €14.83 to €9.79. In a final decision taken early in 2010 ComReg decided that the maximum monthly rental for LLU is €12.41 and for SLU is €10.53. The monthly Line Share price was reduced significantly from €8.41 to €0.77. The incumbent's appeal of this decision has now been settled. Furthermore ComReg decided that the one off Migration Premium from Bitstream to Line Share and LLU imposed by the incumbent of €47 should be removed and this decision is now in effect.

For wholesale broadband access ComReg is currently engaged in a project that is considering alternative price control remedies to the current retail minus. ComReg has commenced its second round review of the Wholesale Broadband Access market and expects to issue a consultation paper early in 2010.

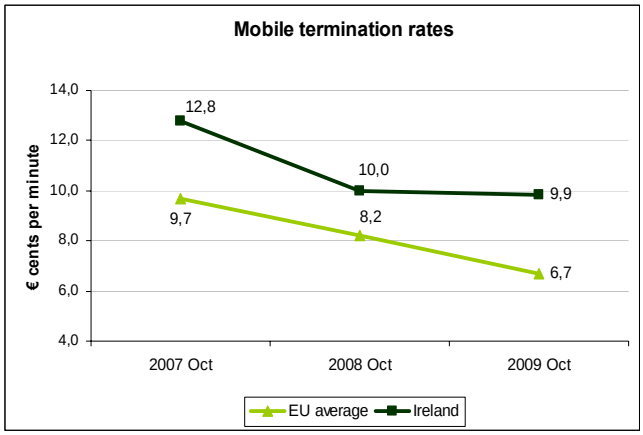
If eventually adopted these revised LLU prices could have a significant impact on the level of unbundling in the Irish market.

Mobile

Market situation

Mobile revenues were around €2.1 billion which accounts for 48% of total retail revenues. Mobile retail voice minutes accounted for 55% of all voice traffic. The mobile penetration rate has remained more or less static at 119.3% in October 2009 which is below the EU average of 121.9%. All four mobile operators now provide commercial third generation (3G) mobile services. Mobile price per minute of voice communication, at €0.10, compared favourably with the EU average of €0.13. Irish Mobile average revenue per user (ARPU) remains among the highest in the EU; in 2009 it was €390.

Regulatory issues



Following voluntary commitments entered into during 2009 all four mobile network operators in Ireland will now each reduce their MTRs annually to reach an average rate of 5 €-cents per minute no later than the end of 2012. ComReg has reserved the right to intervene where rates are materially out of line with EU best practice. Average MTRs are among the highest in the EU and stood at 9.86 €-cents compared to 6.70 €-cents at EU level in October 2009. The implementation of these voluntary commitments should bring MTRs in Ireland closer to the EU average although there remains a significant gap. The Commission emphasises the need for ComReg to review this market shortly and to impose appropriate remedies instead of relying on voluntary commitments.

Roaming Regulation

All Irish mobile operators appear to be in compliance with the amended Roaming Regulation which entered into force on 1 July 2009. ComReg has indicated some concern that one or two operators will not be able to meet the cut-off limit transparency requirements on time and is in contact with these operators on this issue.

Fixed

Market situation

Fixed line revenue and traffic have continued to decline over the year reflecting both the effects of the poor economic climate and structural market changes. Fixed access paths declined by 5.2% while traffic is down by around 10%. The fixed market now accounts for only 45% of total traffic compared to 52% in 2007[167]. The incumbent's market share (measured by retail revenues) in the fixed telephony market was similar to last year at around 68%. This compares with an EU average of around 63.3% in revenue terms.

[167] Source: ComReg.

Approximately 21% of subscribers used an alternative provider for voice telephony services in July 2009 which is down 1 percentage point on the previous year. The number of alternative operators using proprietary infrastructure as a percentage of total alternative operators was 13.6% which is a significant increase on the previous year (5.8%). However, they accounted for an estimated 2% of the volume of fixed communications traffic, below the EU average of 14.48%. ComReg plans to carry out a review of VoIP services in 2010.

Regulatory issues

The incumbent is required to apply cost-oriented fixed wholesale termination prices (using the forward-looking long-run incremental costs — FL-LRIC model). Alternative operators exceeding the market threshold of five per cent of direct access paths or five years from the date of ComReg's decision, whichever is the earliest, will trigger the commencement of a glide path so that the alternative operator can reduce its termination rate towards an efficient cost oriented level. ComReg intends to consult further on the specific details of a glide path or target to be achieved by the alternative operator and the timing of same. The incumbent's termination rates were just below the EU average in October 2009 for single and double transit and slightly above for local interconnection.

In 2008 the incumbent proposed a new wholesale product, called "white label", comprising elements of call origination, transit and termination, and meaning in practice that the incumbent would undertake all switching of calls on clients' behalf. In 2008, ComReg had launched an investigation into this product and in April 2009 issued an information notice stating that it had issued a Notification of Non-Compliance to the incumbent in this regard. ComReg states that the White Label product has not been sold to date in any significant volumes. To help bring certainty to the industry ComReg has decided to consult on a further specification of the pricing for the regulated wholesale inputs used in the wholesale re-sale of voice services to switchless operators ('white label') and indicated that it intended to proceed to consult with industry in relation to this matter.

Single Billing via Wholesale Line Rental (SB-WLR) enables Other Authorised Operators (OAO) to issue one single bill to end users for Carrier Pre-Selection (CPS) 'all calls' and line rental charges. ComReg have now conducted a review of the SB-WLR CoP and has published two documents to replace the original Code that relate to SB-WLR.

Broadcasting

Market situation

The share of Irish TV viewers relying on analogue broadcasting had fallen from approximately 25% in 2008 to approximately 23.6% in 2009. Approximately 37.5% of subscribers use the satellite platform while around 32% use cable. Internet television (IPTV) subscriptions are negligible. The economic environment has delayed the rollout of the DTT network and there is no current launch date for DTT in Ireland.

Regulatory issues

The new Broadcasting Act 2009 allows for the establishment of a new single broadcasting regulator, the Broadcasting Authority of Ireland (BAI), for both RTÉ (the public service broadcaster) and the independent broadcasting sector. It requires ComReg to award spectrum usage rights to the national public broadcaster (RTÉ) in respect of the public service

multiplexes and to the Broadcasting Authority of Ireland (BAI) in respect of the commercial multiplexes. The Act provides for RTE to have established a full national DTT service, providing space for all 4 national terrestrial TV channels by 31st December 2011, or such later date as the Minister for Communications may decide. In addition the Act provides for the BAI to enter into contractual arrangements with independent multiplex operator(s) who will establish, maintain and operate three commercial DTT multiplexes. Following delays with the tender competition, it is now understood that contract negotiations between the BAI and the current preferred bidder for the first three independent multiplex contracts for independent DTT services are progressing. A date for switching off the 'free to air' terrestrial analogue services remains to be set by the Minister for Communications.

ComReg launched a public consultation on the digital dividend in March 2009 and issued its report on that consultation in October 2009. In its Report ComReg indicates that it intends to clear the 800 MHz band to accommodate uses other than broadcasting and provide timely access to this band; consider additional digital dividend spectrum, once the benefits of the 800 MHz band can be fully realised and the core digital broadcasting requirements can be protected; and encourage innovation through *Test & Trial Ireland* rather than create a spectrum innovation reserve using digital dividend spectrum.

ComReg will now further develop its position on Ireland's Digital Dividend and will consult again on the matter, having regard to developments at a national and international level.

Horizontal regulation

Spectrum management

In 2008 ComReg had published its first consultation on liberalising the use of the 900 MHz and 1800 MHz spectrum bands. This was followed in March 2009 with a response to that initial consultation and further consultation. ComReg also provided the opportunity for respondents to Consultation 08/57 and/or Consultation 09/14 to speak to, and clarify, their previous written submissions in a bilateral meeting. ComReg published its latest document in late December 2009. This document sets out ComReg's response to Consultation and further consults on a number of specific matters including proposed licence conditions.

ComReg is seeking to determine how best to liberalise and make available spectrum in the 900 MHz band in accordance with EU legislative requirements and in the context of its statutory functions and objectives.

ComReg's consultations have identified a number of characteristics to be addressed, these principally being:

- the expiry of existing GSM 900 MHz licences commencing in 2011;
- asymmetries in mobile spectrum holdings between existing mobile operators. In particular, three mobile operators each make use of 900 MHz, 1800 MHz and 2100 MHz spectrum whereas the fourth operator uses 2100 MHz spectrum only;
- likely spectrum scarcity in relation to liberalised 900 MHz spectrum;
- asymmetry in relation to GSM 900 MHz licence expiry as two of these licences expire in 2011 and the third expires in 2015;

- liberalising the entire 900 MHz band as soon as possible to ensure the full benefits associated with liberalisation are realised and passed onto users, without creating distortions to competition; and how to allow existing and future licensees to effectively and efficiently determine their location in the band including by facilitating access to contiguous blocks.

ComReg is engaged on the design of a competitive process, a combinatorial auction, which would deal with these issues using market mechanisms, wherever possible. The auction now proposed by ComReg involves a two stage process. The first stage would determine the number of generic 2 × 5 MHz lots won by each bidder and the price by allowing bidders to bid for a certain number of generic lots. Winners would be chosen to maximise the total value of winning bids, subject to not awarding more lots than the number of lots available and maintaining the competition spectrum cap of 2 x 10 MHz. The competition design also allows the spectrum associated with one operator's existing licence to be made available on a liberalised basis in 2010 (i.e. before the scheduled licence expiry in 2015). To achieve this, a package bid would be augmented to include the possibility of releasing existing spectrum as well as buying lots.

The price of spectrum would be set at the level of the second highest bid, reflecting the opportunity cost of the spectrum. Qualifying bids must be at or above a pre-set minimum price. If demand does not exceed supply then all bids in the first stage are won at that price.

Given the outcome of the first stage, ComReg would be in a position to determine all the feasible frequency locations for winning bids on the basis that all winning multiple lots will be assigned contiguous spectrum. The second stage, or assignment stage, would then determine which exact spectrum is allocated to winners (that is, the location in the frequency band), by allowing winners in the first stage to make bids for the lots they have won, to be located at various specific frequencies.

Some market players expressed concern about the uncertainty arising from ComReg's general approach to handling these issues. In particular three of the four existing licensees are concerned about the possible impact on consumers of a potential situation where an existing operator in the 900 MHz spectrum would not get a new right of use for this spectrum.

Implementation of spectrum decisions

The Commission has written to the Irish authorities requesting further detailed information with a view to assessing whether implementation of certain spectrum management issues are in compliance with Decisions 2005/513/EC, 2008/411/EC and 2008/477/EC.

The first of these concerns the band 2500-2690 MHz, where the analysis of the plan shows that it does not seem to be compliant with Decision 2008/477/EC. In particular, the Commission considered that it should be made clear that other electronic communications services can access the band besides the current use of the band by multichannel multipoint distribution services (MMDS).

Concerning the band 3400-3600 MHz, the national usage of the band for "Fixed Wireless Point-to-Multipoint Access (FWPMA)" and "Fixed Wireless Access Local Area (FWALA)" specified in the plan appears too restrictive compared to the Decision, which opens the band for "terrestrial systems providing electronic communications services" and allows both fixed and mobile use.

Concerning both Decisions 2008/411/EC and 2008/477/EC, no information has been provided on how and when the frequencies covered by these Decisions will be made available to spectrum users according to the possibilities open by these Decisions besides the current uses of the band in Ireland.

The Commission is currently considering the response of the Irish authorities to its letter.

ComReg has recently released additional spectrum in the 10.5 GHz band for Fixed Wireless Access Local Area (FWALA) broadband services. Two separate spectrum allocations will be released increasing the amount of spectrum available for FWALA broadband in the 10.5 GHz band by 33%.

In October 2009 ComReg published its Response to Consultation on the release of spectrum in the 2300 - 2400 MHz (2.3 GHz) band. The Response to Consultation sets out ComReg's views on the future licensing of this band including matters such as licence types, national and local, licence duration and competition approaches. ComReg believes that this is an important step given that wireless broadband contributes to a significant amount of the total broadband market in Ireland. Following consideration of some outstanding matters, ComReg will bring forward its final consultation on this valuable radio spectrum band in 2010.

Rights of way and facility sharing

Rights of way and facility sharing, and more specifically optimal use of public assets, is identified as an issue in the Irish government's report on Next Generation Broadband, published in July 2009. This includes a planned one-stop shop to manage access to publicly owned ducting infrastructure. In addition, the report also proposes a planning requirement that certain new build premises should have open access fibre connections.

THE CONSUMER INTEREST

Tariff transparency and quality of service

ComReg carries out a range of initiatives relating to consumer protection and care. Its interactive tariff guide has been updated to include an international roaming calculator. A quality standard for bill presentation has been launched and the Disability services forum continues to keep a consistent focus on accessibility issues.

Universal service

The incumbent has made formal requests to ComReg for compensation of the net costs involved in meeting universal service obligations for 2006/07 and 2007/08. In 2007 ComReg published a Decision Notice which set out the process and procedure for the USO funding application and which required the incumbent to submit a full justification for its request, in 2007. As noted in last year's Implementation Report, ComReg is still in the process of reviewing the incumbent's compensation request. ComReg has invited the incumbent to make its application on the basis of actual costs and may consult on this and other issues pertaining to funding of USO.

The incumbent operator is subject to legally binding performance targets concerning its universal service obligations to be achieved by the middle of 2009. In particular, the incumbent is obliged to ensure that 80% of all in-situ connections to the incumbent's network are completed within 24 hours of request and 80% of all other connection requests are

completed within two weeks of request, to reduce the line fault rates, as well as to meet the target of completing 80% of line fault repairs within two working days. ComReg monitors the incumbent's performance on a quarterly basis. The performance data to date indicates that the incumbent has not complied with 11 of the 15 targets. ComReg is considering the incumbent's explanation for its non-compliance and any further action.

Users' access to the Internet and network management

A settlement was reached between the incumbent operator and record companies concerning proceedings which had been instigated against the incumbent over alleged illegal downloading. While full details of the settlement were not published it is understood that the incumbent will operate a "three strikes" policy. This means that after being supplied with the IP addresses of suspected infringers by the aforementioned record companies, the incumbent will twice warn infringers that their IP address has been detected infringing copyright. If these warnings are ignored or unheeded, the incumbent will proceed to disconnect the suspected infringers. It is also understood that these record companies are initiating similar proceedings against other operators in the market. The Commission services will monitor developments in this area.

Number portability

For mobile number portability, approximately 265 000 transactions took place between January and end of September 2009. Approximately 32 000 fixed portability transactions took place between January and end of September 2009. In Ireland the time needed to port a fixed number is 9 days, above the EU average of 6.5 days, whereas the time needed to port a mobile number is one day, substantially below the EU average of 4.1 days.

In January 2009 ComReg published a decision in relation to the maximum charges for wholesale fixed and mobile number porting. The revised porting charges will result in reductions of up to 90% in relation to the wholesale mobile number porting (MNP) charges and reductions of up to 70% to wholesale fixed number porting charges. The decision states that a mobile operator cannot charge in excess of €2.05 to another mobile operator for number portability. Similarly, a fixed operator cannot charge in excess of €4.02 to another fixed operator for fixed number portability. ComReg also set out a number of other wholesale fixed number portability charges, including a maximum charge of €3.50 for Geographic Number Portability (GNP) in the context of Unbundled Local Metallic Path (ULMP) and a maximum charge of €5.74 for Non-Geographic Number Portability (NGNP).

Consumer complaints

In terms of contact management approximately 18 200 issues are received by ComReg each year of which 24% are complaints. 82% of these complaints were resolved within 10 days. Most consumer complaints continued to be focused on billing issues in 2009, the other frequently aired subjects being quality of service and contractual terms.

European emergency number 112

A consultation on handling calls from persons with disabilities and other possible call handling enhancements was held during August 2009, the closing date for submissions was 31st August 2009. The Department of Communications, Energy and Natural Resources

(DCENR) expects to finalise its views on the matter in 2010, following discussions with the relevant state and commercial organisations.

Following the introduction of the Communications Regulation (Amendment) Act of 2007, the DCENR tendered for a Supplier to provide the Emergency Call Answering Service (ECAS) for Ireland. On completion of this open tender process an operator was awarded the contract (known as a Concession Agreement) to provide 112 and 999 call answering services. This operator will operate the service for the next five years.

In terms of caller location information – where a person in an emergency situation is unable to state their location for any reason, some mobile base-station location information will be available automatically to the emergency services. Ireland is in the process of building a new emergency call answering service which is expected to go live in quarter 3 of 2010. The caller location information systems are being upgraded to automate the provision of mobile and fixed location information to the PSAPs for onward transmission to the emergency services.

In terms of awareness of 112 only 18% of respondents in Ireland knew that they can reach emergency services from anywhere in the EU by calling the European emergency number 112 (compared to an EU average of 25%) and a relatively high percentage (27%) responded with an incorrect number when answering this question.[168]

Harmonised numbers for harmonised services of social value (116)

The number 116123 for emotional support helplines has already been assigned however it is delayed for funding reasons. The number 116111 for child helplines has been assigned, and is in-service since March 2009. The number 116000 has not been assigned yet.

Must-carry

According to the legal framework in place, the must-carry obligations apply currently to cable and MMDS (Multipoint Microwave Distribution System) operators in Ireland. The new Broadcasting Act 2009 extends the 'must-carry' obligations to all appropriate network providers.

Data protection

Ireland's challenge of the legal basis for the Data Retention Directive (2006/24/EC) was rejected by the European Court of Justice in February 2009. After initial consideration of a draft statutory instrument to transpose the Directive, revised legal advice was issued to the effect that transposition would have to be by way of primary legislation. On 6 July, the Communications (Retention of Data) Bill 2009 was presented to the Irish Parliament. The Bill is intended to implement the Data Retention Directive. It is expected that this draft legislation will be adopted in the near future. The Commission's Infringement Proceeding against Ireland for failure to implement the Directive is ongoing.

168 Eurobarometer Flash survey on the European emergency number 112 (February 2010)

ITALY

INTRODUCTION

The situation remained generally stable in the Italian electronic communications market. The incumbent maintained its dominant position in the fixed market and, to a lesser extent, in broadband. The mobile sector is mature and characterised not only by a high overall penetration but also by a high number of UMTS users resulting in a dynamic take-up of mobile data services.

Regulatory developments centred on the implementation of the incumbent's undertakings aimed at guaranteeing non-discriminatory treatment in the provision of wholesale access services. As the regulator proceeded with the second round of market reviews, the retail markets witnessed considerable deregulation. Moreover, the regulator addressed several specific consumer issues. The transition to digital terrestrial TV was on track with the switch-over of further Italian regions.

REGULATORY ENVIRONMENT

Main regulatory developments

The Italian regulator, Autorità per le garanzie nelle comunicazioni (AGCOM), concentrated on improving wholesale access conditions, while substantially deregulating the retail markets. With regard to broadcasting, a consultation was held on the conditions for a beauty contest for the allocation of five national multiplexes as part of the digital dividend, with a view of opening the market to potential new players.

At the same time, some regulatory uncertainty was caused by delays in approving the incumbent's reference offers, however, the NRA has approved the cost accounts of the incumbent for the years 2005-2007, recovering in this way a part of the delay accumulated in the past years.

Although the European Court of Justice ruled in January that Italy had not complied with EU requirements, caller location information for calls to the European emergency number 112 was still not available at the end of the year.

Organisation of the NRA

The number of persons employed by AGCOM increased further in 2009. Operator’s fees, corresponding to 1.45‰ of their revenues, currently finance 95% of AGCOM's budget, and the remaining 5% is financed by public funding. Towards the end of 2009, discussions took place on some possible revisions of the financing of Italian regulatory authorities (including a loan from AGCOM to the competition authority).

Decision-making

In 2009, AGCOM resumed the second round of fixed market reviews, which were suspended in July 2008, pending evaluation of the undertakings proposed by the incumbent. Draft measures were notified to the Commission regarding the leased lines market and the international calls market. AGCOM proposes not to impose any ex-ante regulation in either of

the markets, since the three criteria test had not been met. The final measure lifting regulation in the international calls market was adopted in October, while the one related to the minimum set of leased lines was adopted in December 2009.

In March 2009, AGCOM notified the market definition and SMP assessment with regard to the markets for retail access, wholesale network infrastructure access and wholesale broadband access. It found lack of competition in the markets and designated the incumbent as having SMP. Subsequently, in September 2009, a notification of the remedies with regard to those markets was registered that included all of the incumbent's undertakings. While AGCOM proposed to remove price control from the retail access markets, in the wholesale markets it proposed to impose access to the copper network, access to passive infrastructures and to dark fibre, as well as Bitstream access.

Alternative operators pointed to a slow decision process within the NRA which was said to have resulted in some regulatory uncertainty. While the existing obligations remained in place, in principle, some of the price caps imposed as remedies expired before the new market analysis could be finalised. In such cases AGCOM modified the existing remedies. Two such decisions were adopted in 2009 and concerned mobile termination rates (MTRs) and the price for local loop unbundling (LLU) services. Moreover, AGCOM has been late in approving the reference offers on many important wholesale services. The Bitstream offer for 2008 was approved only in May 2009, while the one for 2009 has been approved in November 2009. In December 2009, reference offers for the year 2009 regarding the leased lines have been approved as well. The Wholesale Line Rental (WLR) offer for 2009 was approved in August 2009 and the LLU reference offer for 2009 was approved in March 2009.

At the same time progress was made with regard to the delay in the approval of the incumbent's regulatory accounts as, in November 2009, AGCOM approved the regulatory accounts for the years 2005-2007. It was also in the process of appointing a new auditor to check the regulatory accounts for 2008 onwards. The approval of regulatory accounts of mobile operators, for the year 2007, has also been completed.

According to the incumbent, existing regulatory accounting obligations which have been imposed as a result of the market analyses are not sufficiently harmonized across markets. AGCOM was aware of the issue and was working on the definition of a more coherent set of regulatory accounting rules.

According to alternative operators, AGCOM's intervention against the incumbent's abusive practices, has not always been effective. Operators often resorted to apply to the Courts to issue provisional measures, while, overall, the level of judicial litigation among operators has gone down.

MARKET AND REGULATORY DEVELOPMENTS

Revenues in the telecommunication sector in 2008 totalled €43 billion, which represents a decrease of approximately 2.1% in comparison with a year earlier. Surprisingly, the most substantial fall in revenue was registered in the mobile market which decreased by 2.4%, while the revenue generated by the fixed market fell by 1.9%. The total value of tangible investments in the electronic communications sector stood at €6.6 billion in December 2008. Most investments were still made by mobile operators as the fixed incumbent reduced investments in the fixed network by some 11.2% in 2008.

While alternative operators noted some decrease in the number of users, the volume of traffic and general expenditure, the impact of the economic downturn has not been very pronounced.

The implementation of the incumbent's voluntary undertakings consisting of 220 undertakings organised in 15 groups was generally on track and the full operability was planned for April 2010. The incumbent had elaborated key performance indicators (KPIs), and submitted a proposal regarding regulatory accounts. In February 2009 the Supervisory Board administrated by the incumbent was established with responsibility over the KPIs, compliance with the transparency measures on quality and the development of the access network, technical plans and the separation between the information systems of the incumbent's wholesale network services and its retail division. The Board has already dealt with complaints and issued recommendations to the incumbent. The Office of the Telecom Adjudicator (OTA), aimed at resolving disputes on technical and operational aspects in the provision of wholesale services, was established by the incumbent, following a public consultation on its internal regulation. All alternative operators, as well as the incumbent, have subscribed the OTA agreement.

It is too early to see the effects of the undertaking in terms of a change of the competitive situation. Several complaints filed by alternative operators on some aspects of the implementation of the incumbent's undertakings were being addressed within the framework of a working group, established by AGCOM in October 2009.

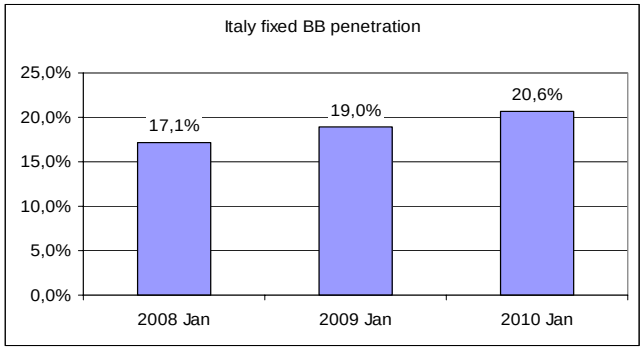
Alternative operators regarded most of the undertakings as simply implementing existing regulatory obligations, while complaining that other provisions left the incumbent a high discretionary power due to their generic nature. Overall, alternative operators were concerned that the mechanism provided for by the undertakings allowed the incumbent to self-regulate, thereby to some extent diluting AGCOM’s power and ability to intervene. They did not note substantial improvements in the delivery process and expressed doubts if the proposed KPIs would allow them to verify whether the process is effectively non-discriminatory. They would also like the Supervisory Board to take concrete actions to ensure the enforcement of the undertakings.

The incumbent, on the other hand, contended that the undertakings were delivering a new model of operational separation providing equivalence of access and parity of treatment.

In the view of AGCOM, the incumbent's undertakings are likely to improve the competitive conditions in wholesale and retail fixed access markets through appropriate and stable measures. AGCOM was actively verifying the compliance and effective implementation of the undertakings and alternative operators were playing an active role in the process.

Broadband

Market situation



Broadband penetration continued to increase at a stable pace and reached 20.6% as of January 2010, compared to 19.0% a year earlier. However, it remained below the EU average of 24.8%.

DSL was still largely the dominant technology and its market share even increased slightly to reach 96.8% as of January 2010. 76.9% of fixed broadband lines in Italy provided for speeds above 2Mbps, below the EU average of approximately 83.8% for this segment, however cable operators (generally capable of providing higher speeds than those available over DSL) were not present in Italy.

While the incumbent's market share in terms of broadband lines was still high, it decreased by some 3 percentage points in the reporting period to reach 56.8% in January 2010.

Mobile broadband penetration was dynamic as the mobile broadband penetration rate, based on dedicated data service cards or modems, reached 6.8% as of January 2010, above the EU average of 5.2%.

Italy remained one of the top performers as regards local loop unbundling. The number of fully unbundled lines stood at 3 million in January 2010. It also performed well in Bitstream access with 1.7 million new entrant lines based on this form of access.

As regards digital divide, some eight million Italians still did not have access to Internet. In June 2009, the Minister for Economic Development – Communications Department announced a plan for providing all Italian citizens with Internet connections capable of supporting speeds up to 20 Mbps, for around 96% of the population and up to 2 Mbps for the remaining part. The plan, corresponding to a total investment (primarily achieved through fibre) of €1.471 billion, was to be achieved by the end of 2012. It should have received a public funding of € 800 million, but no decision was taken in 2009.

Furthermore, the concept of joint network roll-out, first outlined in AGCOM's annual presentation to parliament, was being discussed throughout 2009. While the financing could be secured by the participation of the *Cassa dei Depositi* or a foreign lender, and operators generally welcomed the idea, there was no agreement on the possible role of the incumbent in the process.

At the same time, the deployment of the incumbent's Next Generation Networks (NGN) continued in 2009 with a focus on some metropolitan areas. Since 2007, the incumbent has been deploying NGN based on FTTB (Fibre to the building) in the largest cities such as Milan and Rome. It was planning to expand investments, based on FTTC (Fibre to the curb), to cover also smaller towns and peripheries as of 2011. It estimated the level of capital expenditure at approximately €6.5 billion for the period 2009 - 2016 with the objective of enabling 65% of fixed access lines to support high speed broadband services by 2016 (the remaining parts would be served with the ADSL2+ technology allowing for speeds of up to 20 Mbps). In December 2008, the incumbent and an alternative operator had started trials for high speed services based on a fibre network in the city of Milan, however, they have not yet launched commercial services.

Regulatory issues

With the notification, in March 2009, of the markets for retail access, wholesale physical network infrastructure access and wholesale broadband access, AGCOM re-launched its second round of fixed market analyses, suspended in 2008 in relation to the discussion of the incumbent's undertakings. It found lack of competition in the markets and designated the incumbent with SMP. The notification did not include regulatory obligations and, as it only succinctly referred to the undertakings of the incumbent (approved in December 2008), the

Commission invited AGCOM to notify the undertakings together with the proposed remedies. The Commission took the view that as the undertakings were aimed at facilitating the enforcement of obligations to provide access on a transparent and non-discriminatory basis, once made binding they could be considered as directly related and ancillary to access obligations.

In September 2009, AGCOM notified a draft decision on the remedies to be applied to the access markets including the full set of the incumbent's undertakings. AGCOM clarified that the undertakings constitute part of the regulatory remedies insofar as they affect regulatory procedures and, in this context, facilitate the implementation of the regulatory obligations.

As far as the undertakings are concerned, the Commission, in its comments emphasised that any modifications of the undertakings insofar as they constitute, directly relate to or are ancillary to remedies, should again be subject to consultations at national and Community level prior to their adoption. With regard to the newly established bodies (i.e., the Supervisory Board and the Office of the Telecommunication Adjudicator, OTA Italia), which aim at facilitating the enforcement of the undertakings, the Commission stated that they should not interfere in any way with the exercise of AGCOM's ex-officio powers. AGCOM was also requested to spell out the manner in which the undertakings are to be implemented taking account of third parties' comments. With regard to the wholesale physical access market, the NRA proposed to impose access to the copper network, access to passive infrastructures (cables and ducts) and to dark fibre. Bitstream access (at DSLAM, ATM and corresponding Ethernet levels) was also proposed. On the other hand, AGCOM did not plan to mandate unbundled access to the fibre loop as it considered that fibre access network infrastructures in Italy were still in the developmental phase.

With regard to price control, AGCOM proposed to move away from the existing approach based on Fully Distributed Costs methodology. It intended to impose a price cap based on a bottom-up LRIC model which was planned to be adopted at the end of March 2010 and to be applied as of May 2010. With regard to access to ducts and dark fibre, it planned to impose fair and reasonable prices (to be monitored by AGCOM also by means of international benchmarks).

In its comments, the Commission regretted that AGCOM did not impose a cost oriented methodology to regulate access to civil infrastructure and dark fibre and invited AGCOM to revisit its analysis. The Commission was also not convinced that access to passive infrastructure and Bitstream access over optical fibre would be sufficient to safeguard effective competition and called on AGCOM to reconsider the imposition of unbundled access to the fibre loop. Moreover, as AGCOM did not foresee the imposition of any specific remedies relating to the migration from copper to fibre infrastructure (besides the transparency obligation requiring the incumbent to communicate its plans for the development of the fixed access network), the Commission called on the regulator to come forward with appropriate regulation and to provide further guidance in the context of the NGA roll-out in order to ensure legal certainty for investors.

Final measures with regard to these markets were notified on 21 December 2009 and the Commission services were in the process of analysing them. According to AGCOM an interim wholesale offer aimed at enabling alternative operators to provide broadband services over fibre was being envisaged.

Alternative operators were concerned that the new methodology for wholesale access (based on an LRIC model, supported by the Commission in its comments letter) may lead to price increases. In March 2009 the NRA had approved an increase of 11% of the monthly rental for LLU as part of the incumbent's RUO for 2009. The new value was based on the analysis of the incumbent's regulatory accountancy for the year 2006. Alternative operators were concerned that the increase was not justified by more recent audited costs, while, according to AGCOM, 2007 accounts confirm the increase. The new price for a full LLU monthly rental at €8.49 is close to the EU average of €8,55.

The incumbent's offer for bitstream for the year 2009 has been approved by AGCOM in November 2009 with significant modifications. With the approval decision, (not notified to the Commission) the NRA restored 2008 prices regarding symmetric access and decreased the prices of ADSL access as well as ATM and Ethernet bandwidth.

While, overall, the regulatory approach to Next Generation Access (NGA) was not yet clearly defined, AGCOM was coordinating a series of external studies on different aspects of NGA and it had also formally given the NGN Italia Committee (a multilateral advisory working group open to all interested operators) the task of defining, the migration procedure towards NGA. A proposal containing regulatory solutions for LLU and bitstream over fibre, in-building wiring and infrastructure sharing was expected in 2010. The Ministry of Economic Development (the Ministry) had launched a study to examine various regulatory and economical implications of different network architectures. However it has not yet provided for a solid policy background for the deployment of NGA in Italy.

Mobile

Market situation

Overall, the Italian mobile market is a mature market characterised by a high number of UMTS users and a high mobile penetration rate, which in October 2009 stood at 146.0%, the second highest in the EU. A slight decrease in the number of subscribers in the reporting period was due to the expiry of special offers linked to handset acquisition, and exclusion of inactive SIM cards. Most subscribers were pre-paid users as only 14% of subscribers opted for a post-paid plan.

The market shares of the four mobile operators have remained relatively stable with the largest operator having a market share of 36.4% as of October 2009, while its main competitor held 33.2% of the market and the other competitors had a share of 30.3%.

The cost of a minute of a mobile voice communication stood at €0.10 in December 2008 below the EU average of €0.13 while the average revenue per user in mobile networks was €262 per year comparing to the EU average of €323.

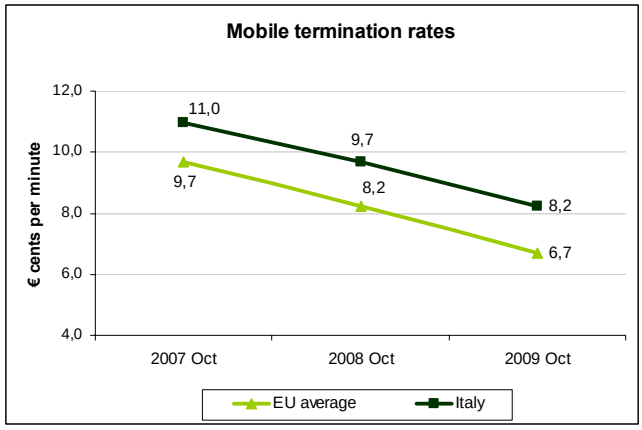
In accordance with the glide path set in 2008, mobile termination rates decreased as of 1 July 2009 to the level of 7.70 €-cents for the two largest players, 8.70 €-cents for the third player and 11.00 €-cents for the latest entrant. However, they are still substantially above the EU average of 6.70 €-cents as of October 2009. Complete symmetry among the four operators will be reached by 2012.

There were 16 mobile virtual network operator (MVNO) agreements signed with the four mobile network operators. Most MVNOs are large distribution chains, one is operated by the

Italian Postal Service, and three MVNO agreements have been signed with fixed operators. The MVNOs take advantage of their customer base in the original market and the economies of scale (i.e. cross promotion offers for large distributors, integrated services for fixed operators, and international offers for ethnic operators). Their overall market share was 2.1% as of September 2009, according to NRA data.

Operators complained about problems in setting up WiMAX networks (the frequencies for which were auctioned in March 2008), due to difficulties created by the delays in receiving authorisations from local administrations, as well as technical interference problems. According to the Ministry, only one official request of intervention for interference problems was registered which has been settled.

Regulatory issues



Mobile termination rates were a contentious issue. Since June 2009, AGCOM started working on revising MTR values on the basis of a "bottom-up long-run incremental cost" model. The larger mobile operators as well as the fixed operators were concerned about the high level of the termination rates of the fourth entrant. However, this company maintained that its MTRs were in line with those applied by the competitors at the time of their entry into the mobile market, which allowed them to recover their investments, and that the asymmetric regulation was justified by cost differences due to its UMTS network. It would have liked AGCOM to delay the decrease of its MTRs by one year.

Fixed operators pointed out that an LRIC bottom-up model for fixed alternative operators' termination rates has been applied since 2008 and urged AGCOM to speed up the process, to avoid anticompetitive transfers from mobile to fixed services.

Another important development concerned the price of SMS. Following the outcome of an investigation by AGCOM and by the competition authority concerning the level of retail tariffs for SMS and MMS, mobile operators committed to voluntarily agree to a price cap set at the regulated level of SMS prices under the international roaming regulation. Operators, however, noted that a majority of users benefitted from various packages and promotions and were effectively paying less.

With regard to mobile access, a final decision on the mobile access market was adopted in February 2009, confirming that this market does not fulfil the three criteria test for ex ante regulation, in particular with reference to the second criterion (i.e. whether the markets will tend towards effective competition over time). As a consequence, AGCOM did not proceed with the SMP analysis and did not impose any remedies.

In March 2009, AGCOM set up a working group with operators, aimed at sharing and solving contractual problems.

Roaming Regulation

In general, all mobile operators complied with the provisions of the Roaming Regulation of July 2007 and the amendment to the Regulation, in force since July 2009.

Fixed

Market situation

The incumbent remained largely dominant in the fixed market, as its market share in terms of revenues remained substantially stable at 64.8% as of December 2008. The percentage of subscribers using the incumbent for direct access also remained high at 78.0% in July 2009. However, 32 operators were offering telephony services through unbundled access to the incumbent's network.

While operators were attracting subscribers by offering packages of free calls, the incumbent was strongly marketing its competitive VoIP-based offers which include in a bundle a monthly subscription and call packages. Alternative operators raised concerns with regard to services offered by the incumbent over IP technology as, according to them, the offer was not replicable. According to AGCOM, it has verified the VoIP-based services concluding that they were replicable. A case relating to the approval of the offers was pending before the administrative tribunal.

Fixed termination rates remained below the EU average and decreased further, in line with the glide path set in 2008 which should lead to symmetric termination rates (for interconnection at single transit level) with the incumbent by July 2010 (at the maximum level of 0.57 €-cents).

Regulatory issues

The retail fixed market witnessed some considerable deregulation in 2009. In its notification of the market for access to the public telephone network, of September 2009, the NRA proposed to withdraw the incumbent's obligations with regard to retail price regulation. At the same time, AGCOM maintained the obligation to notify prices and conditions 30 days in advance of the commercial launch of retail services as well as cost accounting, and replaced the general ban on bundling services by an obligation not to unreasonably bundle retail offers. AGCOM was of the view that the existing wholesale obligations (also in light of the incumbent's undertakings) together with the retail obligations of cost accounting and price notifications will enable it to apply a margin squeeze test in order to detect any price-related anticompetitive behaviour. Final measures were adopted in December 2009 to this result.

In October 2009, AGCOM withdrew the incumbent's existing regulatory obligations in the markets for international telephone services provided at a fixed location (for both residential and non-residential customers), and in December 2009 lifted regulatory obligations imposed on the incumbent operator in the first round of market analysis regarding the retail market for the minimum set of leased lines. The Commission took note of this draft without issuing specific comments.

In October 2009 AGCOM furthermore notified the wholesale markets for trunk segments of leased lines and for terminating segments of leased lines in Italy. While AGCOM found the market for trunk segments of leased lines competitive and proposed to withdraw the existing

regulatory obligations, it proposed to define two separate markets for the provision of terminating segments of leased lines. It found that the market for the provision of terminating segments lines defined as circuits provided between the incumbent's node to which an alternative operator is interconnected and a mobile operator's base station as competitive due to an increasing number of mobile operator's wireless connections, and proposed to remove existing remedies possibly following a transitory period. At the same time remedies relating to the remaining part of the terminating segments of leased lines market would be kept in place. As in the market for leased lines connecting base stations, the incumbent's network has not yet been fully replicated, the Commission asked AGCOM to remove regulatory obligations only after a transition period long enough to enable mobile operators to eliminate remaining bottlenecks in their networks.

As regards WLR, the incumbent was obliged to provide the service on all non-active lines and on active lines not opened to LLU. The incumbent was obliged to publish a WLR reference offer and price control was imposed. While WLR became effective in 2008, at the end of June 2009 there were already some 748 000 WLR lines, according to operator data. As the monthly fee for WLR was calculated on the basis of a retail-minus methodology (-12%), the monthly fee for WLR increased by 10.4% in 2009 following a corresponding increase in the incumbent's retail line rental fee. Alternative operators were concerned about delays in the implementation of WLR on non-active lines and a substantial level of refusals. They also felt that the reference offer lacked quality assurance service level agreements which would enable alternative operators to offer adequate services for business subscribers. According to AGCOM, the procedures relating to non-active WLR lines have been improved with the approval of the WLR reference offers.

Broadcasting

Market situation

The year 2009 witnessed a further reduction in the number of households relying on analogue terrestrial broadcasting, which remained the most popular means to receive TV broadcasts. As of July 2009, 62.5% of households used analogue terrestrial, while digital terrestrial was the second platform (at 38.3% of households) and 27.3% of households opted for satellite providers. IPTV managed to attract 598 000 households representing only 2.5% of all households, and cable operators are still not present in the Italian market.

Italy was on track for the complete switch-off of analogue TV transmission by the end of 2012, according to the timetable approved by the Italian Government in September 2008. Following the successful transition to digital in Sardinia in 2008, the switch-over continued in 2009 in the following areas: Valle d'Aosta, Trentino and the western part of Piedmont, Alto Adige, Latium and Campania. The technical solution adopted (Single Frequency Network) paired with planning and pre-selected assignment procedures were chosen to maximise the available spectrum of radio frequencies.

The smooth transition to digital terrestrial television (DTTV) was supported by public and regional contributions for the purchase of DTT decoders for specific groups such as the elderly or those with low incomes. Information campaigns have also been carried out by local and national entities. IPTV and satellite operators would have liked to see more information about the possibility to migrate to other platforms during the campaigns.

The large broadcasters set up a joint commercial group providing content transmission and platform services over DTT technology. The new platform, which distributed decoder cards priced at cost levels, was particularly successful in attracting users in areas where analogue transmission had been switched-off. The group members also agreed on an automatic order of TV channels. Smaller broadcasters were concerned that most users would apply this automatic default order rather than manually setting the order of channels and would thus not be easily found by users.

Consumer associations expressed some concern with regard to several local areas remaining uncovered by digital terrestrial television (DTT) or channels no longer being broadcast. AGCOM explained that broadcasters, with the exception of the public broadcaster, were not, at present, subject to any coverage obligations and actual coverage of DTT transmissions depended on their commercial strategy.

Regulatory issues

In August 2009, AGCOM launched a public consultation on the selection procedure for the allocation of five digital multiplexers resulting from the digital dividend aimed at opening up the strongly concentrated Italian broadcasting market to new players. The allocation would be done through a beauty contest whereby three of the multiplexers would be reserved for new players in the market. The draft selection rules also provided for a five-year ban on frequency trading following the switch-off. While this condition aims to avoid proxy participants in the selection procedure, some broadcasters considered that the time-frame was disproportionately long.

The proposal under consultation did not provide for any frequencies resulting from the digital dividend to be allocated to electronic communications services instead of broadcasting transmission. At the same time, the selection procedure would encompass the allocation of one multiplexer for mobile TV in the DVB-H standard.

Horizontal regulation

Spectrum management

In October 2008, AGCOM approved the reorganization of the 900 MHz and 1800 MHz frequency bands aimed at allowing existing GSM operators to have contiguous blocks of frequencies. The use of the bands for 3G services was to be authorised, following the entry into force of the GSM Directive.

Moreover, re-farming in the 900 MHz band would free a block of 5 MHz. The block was allocated to a UMTS network operator following a competitive selection process. The frequencies will allow the operator to complement the UMTS network, in particular in suburban areas. However, according to the Ministry's plan, the frequencies in the 900 MHz band were to be only progressively released by the GSM operators between September 2011 to December 2013, with the majority of the frequencies released during 2013 (to reach 90% of the population by mid 2013). Until the complete release of the 5 MHz within the 900 band, the larger mobile network operators were obliged to negotiate national roaming agreements with the fourth player at commercial conditions. The fourth player was concerned that the plan created an undue advantage for the larger operators which were to benefit from the re-farming before it would effectively be able to use the 900MHz band. According to the

Ministry, several initiatives were adopted in order to monitor and evaluate the implementation of the plan.

At the same time three blocks of 5 MHz frequencies in the 2.1 GHz band, made available by an ex-3G operator, were assigned in June 2009 to the three large mobile network operators. Their minimum offers presented during the selection process amounted to nearly € 89 million.

Implementation of spectrum decisions

According to the Italian authorities, the Commission Radio Spectrum Decisions 2008/477/EC and 2008/411/EC have been correctly implemented by a Ministerial decree of 13 November 2008 in response to a request from the Commission services for further information demonstrating how these two decisions have been implemented. All other spectrum harmonisation decisions from 2008 were implemented by Ministerial Decree. As of December 2009, Italy had not published any radio interface in the ERO Frequency Information System (EFIS) as required by Decision 2007/344/EC.

Rights of way and facility sharing

Discussions relating to the conditions for the installation and maintenance of network infrastructure on public roads continued throughout 2009. Despite intensive negotiations with operators, no final agreement with regard to the rights of way arrangements of the public entity *Azienda Nazionale Autonoma delle Strade* (ANAS) was concluded in 2009. While agreement was reached with regard to the economic and legal parts, the technical annexes still needed to be reviewed.

THE CONSUMER INTEREST

Tariff transparency and quality of service

Consumer associations pointed to a number of issues relating to the low quality of networks. In particular, with regard to mobile networks, consumers were concerned about increased costs as a result of operators repeatedly charging for call set-up when a connection was dropped due to the low quality of the networks. Overall, while operators were obliged to regularly measure and publish a series of quality indicators, AGCOM was monitoring and verifying the quality of the universal service and started investigations concerning the call drop-off rate for mobile calls.

Users were also able to compare information on the quality of services on AGCOM's website. At the same time, as of October 2009, a new system has been introduced to allow users to verify the speed of their broadband connection. In this way consumers are informed about the level of services and may withdraw from their contract in case of divergence with the declared minimum connection speed. Moreover, the NRA has adopted a decision setting minimum quality standards and general principles of behaviour for call centres and its staff and enforcement proceedings related to the decisions were ongoing. AGCOM is also working on developing a tariff comparison tool. To this purpose, at the end of June 2009, an accreditation scheme was approved which aims to ensure that consumers are provided with up to date and accurate tariff information.

Fraud and incorrect use of premium rate numbers have been a persistent problem for Italian consumers. During the past two years, the Italian authorities intervened several times by imposing selective call-barring for particular premium rate numbers, and by increasing billing

transparency. Following a decision by AGCOM of October 2008, an opt-in model replaced the opt-out model used so far, resulting in operators implementing automatic call barring of most of premium rate service numbers. However, following an appeal, in August 2009 the *Consiglio di Stato* annulled AGCOM's decision. Following a new public consultation on the same proposal (requested by the *Consiglio di Stato)* AGCOM reintroduced the measure in November 2009. Some service providers expressed concerns that the measure was discriminatory as allegedly certain numbering groups over which value added services were being provided have been exempted from the blocking measure without objective justification.

Universal service

While no formal designation has taken place, the incumbent continues to provide the universal service and the scope of the service remained unchanged. In December 2009, AGCOM started a revision of the current obligations relating to the public payphones in order to rationalise costs and allow better use of the available resources.

AGCOM was very late in approving the calculations for the net cost of the provision of the service as the latest approved net cost contribution related to 2003. While operators had contributed their share of the net cost (some €16 million out of €41 million), AGCOM had not reimbursed the incumbent in 2009. At the same time, the evaluation for the years 2004 to 2008 was pending. With regard to 2004, AGCOM recognized an "unfair burden", and an approval of the net cost calculation was expected shortly. An auditor has also been appointed to analyse the calculations relating to 2005 and 2006 planned to be approved by spring 2010. In parallel, AGCOM was working on appointing an auditor for the analysis of net cost calculations from 2007 onwards.

The delay in the approval of net cost was mainly due to the revision of the methodology approved by AGCOM in 2008. Some aspects of the new methodology such as the definition of profitable areas also applied retroactively to the cost calculations since the year 2004. The incumbent contested this retroactivity and appealed the decision. In March 2009, AGCOM launched a public consultation on a revised proposal for the methodology which in turn was appealed by alternative operators which argued that AGCOM did not correctly take into account the intangible benefits stemming from universal service provision.

Number portability

Mobile number portability continued to be very popular as some 4 million mobile porting transactions have been registered between October 2008 and 30 September 2009. In total, since number portability became introduced, the number of portings represents a substantial share (25.1%) of the total mobile subscribers. The number of fixed porting transactions increased from 1.01 million as of 1 October 2008 to 1.25 million as of 30 September 2009. Fixed number portability took on average 15 days, much above the EU average of 6.5 days, and it took 5 days to port a mobile number comparing to the EU average of 4.1days, as of October 2009. While the wholesale price for porting a fixed number stood at €8.47, there were no charges for porting mobile numbers.

AGCOM's Decision of December 2008, which reduced the time for the porting of mobile numbers from five to three working days, increased the daily porting capacities of operators and cancelled the inter operator charge was appealed by two operators to the Administrative Tribunal of Rome (TAR). In June 2009, the Court affirmed the right for operators to claim 30

days notice for withdrawal from a contract before starting the portability procedure and the judgement was interpreted by the larger operators as granting them the possibility to contact customers for retention purposes. However, in September 2009, the Council of State suspended the TAR decision, recognizing that the high number of porting refusals was detrimental for the smaller players concerned. Since the end of November 2009, operators have implemented the new regulation and, following some initial technical refinements, procedures are now working properly and the goal of three days porting time for mobile numbers has been achieved.

Following the operative introduction of a new procedure for migration between fixed operators and between different types of wholesale services in mid-2008, practical problems have been addressed by AGCOM during 2009. In order to safeguard users and avoid frequent unrequested migrations, a migration PIN-code was introduced in July 2009. The code is necessary for the recipient operator to initiate the migration process. On the basis of AGCOM's decision, as of November 2009, migration times were substantially reduced. Migration should not take more than 10 working days which will be reduced to five days as of March 2010. Moreover, in case of unrequested migration, the user will have the right to re-establish the previous configuration within five working days.

Moreover, both AGCOM and the competition authority intervened throughout 2009 to ensure that mobile operators do not resort to unlawful practices in order to retain customers during the portability process. Significant fines were imposed for anticompetitive behaviour and inappropriate use of subscriber data.

Consumer complaints

Out-of-court dispute resolution, by regional entities set up for this purpose (Co.re.com), consumer associations or other authorised entities, was mandatory in Italy. However, after 30 days, irrespective of the result of the proceeding, the parties could bring the case before a national Civil Court or before AGCOM for a binding decision. A Judgement of the European Court of Justice in relation to a request for a preliminary ruling with regard to the mandatory nature of out-of court dispute resolution was awaited.

Some operators have their own specific bilateral procedures in place for dispute resolution. In March 2009, in accordance with its voluntary undertakings (group 14), the incumbent put in place a new procedure aimed at closing pending complaints with regard to premium rate services.

The number of complaints and enquiries received by the NRA's Complaint Management Unit increased form about 7 000 claims recorded in 2005 to approximately 50 000 in 2008 and 2009. To cope with the task of collecting and managing the vast number of enquiries, AGCOM set-up a contact centre service which became operational in March 2009. A dedicated IT tool was also put in place.

European emergency number 112

In January 2009, the European Court of Justice ruled that Italy had breached provisions of the Universal Service Directive as caller location information for calls to the single European emergency number 112 from mobile phones was not yet available. While some steps have been taken in 2009, caller location information was still not available and Italy risks a substantial fine if the case is again referred to the Court of Justice.

At the same time, the Italian authorities demonstrated that when handling 112 calls, the centres receiving the calls were effectively able to transfer callers to the required emergency service.

According to a recent Eurobarometer survey, only 4% of respondents in Italy know that they can call emergency services across the EU by using 112, one of the lowest percentages amongst Member States.[169]

Harmonised numbers for services of social value (116)

The 116 000 European number for missing children has been formally assigned, and the service is operational.

Data protection

Directive 2006/24/EC was transposed into Italian law by Decree Law no. 109 of 30 May 2008 and the new data retention periods came into force as of April 2009. The retention period for telephone traffic was set at six months, (24 in case of judicial proceedings), and 12 months for Internet traffic.

The use of databases for telemarketing purposes, which included subscriber data for which no specific consent was granted, was allowed in Italy under the Italian Decree Law 207 of December 2008 (converted into Law No. 14 of February 2009), until 31 December 2009. Even though the Commission had expressed concerns about the compatibility of the measure with the e-Privacy Directive, the possibility to use the databases was further extended by the Law No. 166 of 20 November 2009 for a further six months following the Law's entry into force. The Commission is looking into the matter.

Moreover, the law modified the opt-in approach, in force since 2005, into an opt-out model. The law provided for a 'Robinson list' to be set up within six months after its entry into force for users which did not wish to give their consent to be contacted for commercial purposes. The Italian Data Protection Authority, which was to monitor the implementation of this list, was concerned about its effectiveness and the security of personal data during the transition period. The Commission was looking into the matter.

169 Eurobarometer Flash survey on the European emergency number 112 (February 2010)

LATVIA

INTRODUCTION

During 2009, strong competition continued in the mobile market with operators introducing comprehensive call packages at attractive prices and with an accelerating take-up of number portability by consumers. The growth rate of broadband penetration, on the other hand, continued to decline increasing Latvia's gap with the EU average broadband penetration. The incumbent operator kept its traditional dominance in the fixed voice market where competition remains limited but also, in contrast to the experience in the last few years, increased its broadband market share. A swift progress was made in the roll-out of the digital terrestrial TV, as a result of which the switch-off date of analogue TV transmissions was advanced to the first part of 2010.

Further to legislative amendments adopted in June 2009, the regulatory functions exercised by the Ministry of Transport concerning allocation of frequencies and numbering were transferred to another ministry. This was done in response to the infringement procedure launched by the Commission in 2008 concerning lack of structural separation of the regulatory function from the activities associated with ownership and control in the case of the Ministry of Transport. In the context of measures aimed at cutting public spending, the Government was considering different reform proposals regarding the Public Utilities Commission (*Sabiedrisko pakalpojumu regulēšanas komisija - SPRK*), Latvia's multi-sectoral regulator dealing also with electronic communications. In 2009, SPRK carried out second round reviews of a number of markets and, in particular, decided to reduce the termination rates of the main regulated operators.

REGULATORY ENVIRONMENT

Main Regulatory developments

One of the most important regulatory decisions taken in 2009 by the SPRK was the reduction, as from 1 April 2010, of the call termination rates of the two established mobile network operators (MNOs) and of the fixed incumbent, which are at present significantly above the respective EU averages.

In the mobile market, following adoption of the new national frequency allocation plan in October 2009, Latvia's mobile operators are now faced with the challenge of making use of the liberalised 900 MHz band. The increased take-up of number portability by consumers was accompanied by ongoing disputes between operators over the wholesale charges.

In the broadband market, the wholesale regulation remained without practical impact as alternative operators continued to compete on the basis of alternative infrastructures. Moreover, the price charged by the fixed incumbent for local loop unbundling (LLU) remained well above the EU average and among the highest in the EU.

In the broadcasting area, the roll-out of digital terrestrial TV (DTTV) was progressing in 2009 to become available across the country in the first part of 2010. At the same time, in the light of the forthcoming switch-off of the analogue transmissions, the implementation of DTTV came under close scrutiny and concerns were raised about the continued availability of TV services to a significant proportion of mostly rural residents currently using analogue terrestrial TV.

Organisation of the NRA

Since the end of 2008, the Government has been reducing public spending by cutting salaries of public officials, accompanied by lay-offs, and reducing the number of public authorities. These measures also impacted on the SPRK. In October 2009, the Ministry of Economics presented to the Cabinet a proposal to merge SPRK with the Competition Council, which was however subsequently rejected by the Cabinet. On the other hand, the Cabinet of Ministers' preliminary document on electronic communications policy for 2009-2015, prepared by the Ministry of Transport, proposed the establishment of a separate regulator for electronic communications building on the ESD.

Following amendments of 11 June 2009 to the Law "On Regulators of Public Utilities", the Government included the salaries of the SPRK Chair and Council members in the general salary scheme of Latvia's public servants and employees. Although they were assigned to the highest available salary grades under this scheme, the salaries of the SPRK leadership were reduced by more than a half, which is reportedly greater than the average 30% salary cut imposed on other Latvia's public servants. The staff of the SPRK will be included in this general salary system as from April 2010, which will also lead to a decrease of their salaries. The Ministry of Economics, which acts as the financial supervisor of the SPRK, was taking steps to gain a greater say over the planning of SPRK's budget, which has been cut by 10% for 2010, as well as tightening control over its disbursement by the SPRK.

In October 2008, the Commission launched an infringement proceeding against Latvia under Article 3 of the Framework Directive, which provides for 'structural separation' of regulatory functions exercised by the national regulatory authorities from their activities associated with ownership or control in State-owned communications and networks providers. The Commission held that this provision was breached in the case of the Ministry of Transport, which was in charge of the preparation of Government decisions regarding frequency allocation and the national numbering plan and at the same time exercised activities associated with ownership or control in State-owned communications undertakings.

In response to the reasoned opinion issued by the Commission in April 2009, amendments to the 'Electronic Communications Law' were enacted on 12 June providing that the Ministry of Regional Development and Local Self-Government prepares draft decisions concerning frequency allocation and national numbering plan. The Commission services are monitoring the practical implementation of this transfer of responsibilities between the two Ministries, in particular as regards amendments to the relevant secondary regulations to ensure the effective transfer of functions and in the light of the fact that the Ministry of Transport is due to keep under its supervision the ESD, which exercises a number of functions regarding radio frequencies and numbering.

Decision-making

During 2009, SPRK carried out a number of second round market analysis. In markets where SPRK proposed to keep the existing SMP designation and remedies unchanged, no formal decisions are issued since the former decisions are considered to remain in effect. This policy of the SPRK raises important question as to how operators can exercise their right of appeal against the SPRK decision to extend the previous decision and about the follow-up given by the SPRK to the comments made by the Commission. With regard to the latter, it should also be noted that the amendments to Electronic Communications Law passed in July 2008 obliged the SPRK to amend its draft measures in accordance with the Commission comments regarding remedies.

In assessing the operation of SPRK, many industry representatives expressed the wish that it should play a more active role in resolving disputes, referring in particular to the ongoing dispute between MNOs over wholesale number portability charges. It would appear that SPRK's strategy regarding disputes is to push for commercial settlement rather than take formal dispute resolution decisions.

In the area of consultation, operators still considered inadequate the feedback provided by SPRK on the comments made by the industry. The criticism most often raised by the operators with regard to SPRK's consultation procedures in 2009 was the change of the starting dates of its October 2009 decisions on call termination rates – on the day of the decision those were postponed to 1 April 2010 while the previously announced and discussed starting dates for these decisions were 1 January 2010.

MARKET AND REGULATORY DEVELOPMENTS

Since the second half of 2008 the Latvian economy is experiencing a strong economic recession. However, according to the latest available statistics, the total turnover for the Latvian electronic communications sector was about €747 million as at 31 December 2008, which is more than €726 million reported for 2007. The total value of tangible investments in electronic communications networks stood at €163 million in 2008, which is a notable increase compared to 2007.

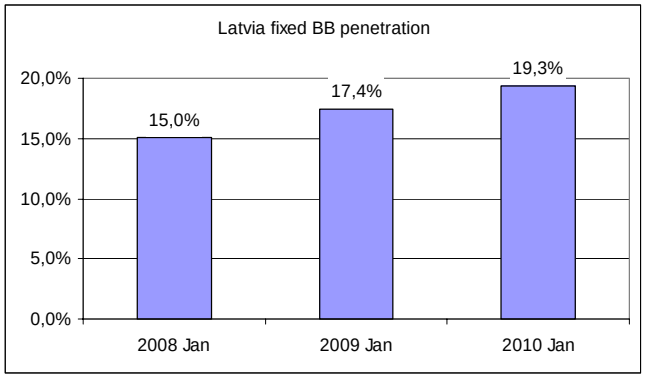
In the area of mobile services, operators reported decrease of revenues in 2009 in particular because business customers were cutting their expenditure on mobile services. Operators continued nevertheless the development of networks to expand 3G coverage, although some of them reported a decrease in investment. Latvia's mobile customers already enjoy the cheapest mobile call rates in the EU and further price decreases can be expected in the future as the result of the reduction of mobile termination rates decided by the SPRK.

A new challenge for the Latvian mobile network operators is the liberalisation of the GSM bands further to the new national frequency plan adopted in October 2009, which allows them to roll out UMTS in the 900 MHz band and to compete notably with the current CDMA2000 mobile broadband offering in the rural areas.

In fixed services, competition is based on alternative infrastructures rather than the use of the regulated wholesale products of the fixed incumbent. Latvia's alternative operators still appear largely uninformed about the vast range of regulatory remedies imposed on the fixed incumbent and the powers of the SPRK to enforce them under the EU regulatory framework. There is practically no 'demand' from the alternative operators to SPRK and, in consequence, also no enforcement action.

There were nevertheless signs that the attitude of alternative operators could change in the future as the fixed incumbent was gaining speed with large scale fibre roll out offering higher access speeds, which the alternative operators may not be able to match. In addition, there were indications about increased control by local municipalities over the deployment of aerial networks, which have so far allowed the smaller players to provide competitive broadband services.

Broadband



Market situation

Latvia's broadband penetration continued to increase in 2009 but at a lower rate than in 2008. It increased by 1.9 percentage points to reach 19.3% in January 2010, which is less than the 2.4 percentage points growth in 2008 and less than a half of the 4.5 percentage points growth recorded in 2007. Although the EU average broadband penetration growth was also slower in 2009 (2 percentage points compared to 2.6 percentage points in 2008) to reach 24.8% in January 2010, the gap between Latvia's and EU average broadband penetration rate has accordingly widened for the second consecutive year . As regards mobile broadband Latvia has one of the lowest penetration rates in the EU of mobile connections using only dedicated data cards/modems/keys typically allowing mobile Internet via laptops (1.7% compared to the EU average of 5.2%).

In terms of fixed broadband speeds, although Latvia's share of lines in the top range of 10Mbps and above has more than doubled in 2009 (20.7% in January 2010 compared to just 8.8% a year ago) it still remains below the EU average of 23.2%, which has also increased significantly compared to 14.1% a year ago. The share of lines in the 2 to10 Mbps range, which is the most common bandwidth in the EU, has also increased from 53% a year ago to 61.2% in January 2010 and is close the EU average share of 60.6%. The share of low-speed lines (up to 2Mbps) has accordingly dropped sharply from 38.1% to 18.1%; yet their share remains slightly above the EU average of 16.2% in January 2010.

During 2009, the fixed incumbent accelerated the deployment of FTTH networks in several residential districts of Riga and in Jelgava with plans for expansion in other regional centres. These networks currently allow for broadband speeds of up to 100 Mbps and there is ambition to bring the speeds up to 500 Mbps in the further stages of development. The fixed incumbent's progress in broadband is also confirmed by its market share, which increased over the past year to reach 51.8% in January 2010 compared to 46.4% a year ago and now exceeds the EU average incumbent's market share of 45%.

As regards rural broadband, a CDMA2000 wireless network across the entire territory was completed in 2008 allowing access speeds of 256/128 Kbps. A new project for the period 2007-2013 is planned to provide for the last mile connectivity ensuring at least 2 Mbps transmission speeds. In 2009, the Latvian authorities decided not to invest in rural broadband the resources allocated through the special EU facility for economic recovery.

Regulatory issues

In the light of the poor take-up by alternative operators of the fixed incumbent's regulated wholesale offers, in September 2008 SPRK issued a consultation document to gather operators' views. Only two operators responded to this consultation and, in 2009, the take up of wholesale products still remained non-existent. Two operators have conducted negotiations with the fixed incumbent on LLU and a contract has been concluded with one of them but has not yet been applied in practice.

This lack of take-up is explained by the specific market conditions in Latvia where it remains relatively easy and cheaper for alternative operators to duplicate infrastructure rather than going through the hassle of negotiating on difficult issues such as collocation and points of interconnection. This situation may, however, change in the future to the disadvantage of the small operators as many local municipalities, in particular Riga, are considering restrictions on aerial cables, which have so far ensured the relative ease of rolling out alternative networks and competition in the broadband market. Also, while it may not be commercially attractive to go for unbundling the current copper networks due to their limited technical capacities, the fixed incumbent is currently investing massively in FTTH and the smaller operators may no longer be in a position to match its offer, thus creating incentives for them to seek wholesale access.

Another important reason for the lack of LLU could be the insufficient margin between the wholesale costs and retail prices. In October 2009, the monthly average total price charged by the fixed incumbent remained €13.72 for full LLU and 7.83€ for shared access, both of which are well above the respective EU averages of 9.75€ and 3.53€ and among the highest in the EU.

In 2009, the SPRK carried out a second round review of the wholesale market for (physical) network infrastructure access (including shared or unbundled access) at a fixed location, which was notified to the Commission in October. Unlike the first round analysis, fibre networks have been included in the market definition. The SPRK proposed to maintain unchanged the existing remedies, imposed on the fixed incumbent 2007, which include price control obligation. SPRK was also planning to review shortly the wholesale broadband access market, which is also expected to include fibre in the relevant market.

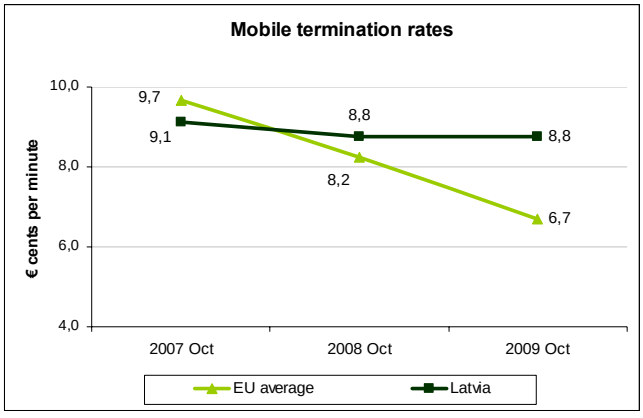
Mobile

Market situation

The mobile penetration rate was reported to be up again to reach 102.4% in October 2009, which was below the EU average of 121.9%. The Latvian mobile market is highly competitive. According to operators, retail prices were reduced in 2009 at about the same rate as in previous years, i.e. about 10% a year. A notable development in mobile markets in 2009 was the offer of 'all inclusive' tariff packages by all the mobile operators, allowing customers to call any mobile and fixed number at the same price, thus making less attractive the use of separate SIM cards for each network. As of October 2009, Latvia was reported to be the EU leader in terms of mobile retail prices with just € 0.04 average price per minute, which is less than one third of the EU average of € 0.13. The annual average revenue per mobile user was also the lowest in the EU at €104 in 2008, which was less than a third of the EU average of €323. MNOs reported a continuous rise in the usage of data services.

Regulatory issues

Further to the voluntary decrease in 2008 of their termination rates by the new mobile entrant using GSM/UMTS technology and Latvia's fourth mobile operator using CDMA2000 technology, the mobile termination rates of all Latvia's mobile operators stood at 0.062 LVL (8.75 €-cents). In 2009, this was considerably higher than the EU average,



which decreased to 6.70 €-cents in October 2009.

In October 2009, following a consultation, SPRK set the maximum termination rates of the two established MNOs and of the fixed incumbent by introducing a four-year glide-path until 1 January 2012. The termination rates of the two established MNOs will decrease to 0.047 LVL on 1 April 2010 (about 6.70 €-cents) and will go down to 0.026 LVL (about 3.70 €-cents) on 1 January 2012. These measures, taken on the basis of the price control remedies imposed on these operators in the 1st round market analysis back in 2006, were only notified to the Commission and national regulators in other Member States in January 2010.

In parallel with this procedure, in September – October 2009 SPRK also held a national consultation on second round analysis of the mobile termination markets, in which it proposed to extend to the new GSM/UMTS mobile entrant all the same obligations already imposed on the two established MNOs. This market analysis was also notified to the Commission in January 2010.

In addition to the dispute over wholesale charges for number portability, a new dispute arose in 2009 between the two established mobile operators regarding SMS termination charges. This dispute was submitted for formal dispute resolution to SPRK, which is expected to decide on it in early 2010.

Roaming Regulation

Mobile operators were offering voice and SMS roaming services in the EU at retail prices in compliance with the price caps established by the amended Roaming Regulation, which entered into force on 1 July 2009. According to mobile operators, voice roaming revenues were decreasing during 2009 due to lover volumes, which is attributable to less frequent travelling abroad. In accordance with Article 9 of the Roaming Regulation, a new Article 158-5 was inserted in the Code of Administrative Offences on 14 May 2009, providing for a maximum penalty of 10 thousand LVL (approx. € 14000), which can be applied by the SPRK in case of breach of legal requirements governing mobile roaming.

Fixed

Market situation

According to the latest available statistics as of December 2008, the fixed incumbent's market share in the fixed voice telephony market remained stable by both retail revenues and volume of traffic at 81.8% and 95.8% respectively. By both indicators, this is one of the largest market shares for a fixed incumbent in the EU. Compared to mobile and broadband markets, the competition in fixed voice services accordingly remained very limited. The fixed incumbent has a number of contracts with carrier selection (CS) providers, which mainly specialise in international calls, as well as a few contracts with carrier pre-selection (CPS) providers.

Regulatory issues

During 2009, SPRK carried out the second round reviews of the fixed retail market for access to the public telephone network at a fixed location and of wholesale markets for call origination and call termination.

In its consultation document on call termination markets SPRK proposed to maintain the existing remedies on both the fixed incumbent, which is subject to a wide range of remedies including price control, and on the 17 identified alternative fixed operators, which are only subject to transparency requirements. Further to the Community consultation, in May 2009, the SPRK adopted decisions concerning five alternative operators (imposing transparency

obligation on four new entrants and removing the previously imposed obligations on one operator no longer providing termination services). No formal decisions followed concerning the fixed incumbent and the other alternative operators.

As of October 2009, the charge for terminating calls on the fixed incumbent's network remained at 0.008 LVL (about 1.14 €-cents) in the case of both single and double transit. In addition, there is a set-up charge of 0.0088 LVL (about 1.26 €-cents). The average per minute charge for a three minute call was accordingly 1.54 €-cents, which is well above the EU average per minute charge of 0.79 €-cents in case of single transit and 1.09 €-cents in case of double transit.

However, in October 2009, SPRK decided to impose price caps and glide path to reduce the fixed incumbent's termination rate to 0.0075 LVL (about 1.07 €-cents) as from 1 April 2010 down to 0.005 LVL (about 0.71 €-cents) on 1 January 2012 (the call set up charge will then go down to 0.0054 LVL / about 0.77 €-cents). These remedies concerning the fixed incumbent were only notified to the Commission and national regulators in other Member States in January 2010. SPRK did not impose similar caps and glide path on the alternative fixed operators.

As regards the markets for access to the public telephone network at a fixed location and for call origination, SPRK proposed to maintain the previously imposed obligations on the incumbent fixed operator, which include carrier selection, carrier pre-selection, price control and cost accounting in the access market and access, transparency, non-discrimination, price control and cost accounting in the call origination market. The Commission in its comments regarding these two market reviews pointed out that these obligations had so far failed to create more competition in the retail calls market. It therefore invited SPRK to verify the effective implementation of these remedies and to consider the imposition of wholesale line rental (WLR). By the end of 2009, SPRK had not adopted decisions further to the national and community consultations on these markets.

With regard to retail markets, it should be also mentioned that, in 2008, the Competition Council examined a complaint concerning the bundling of voice services with broadband services by the fixed incumbent. It did not find the fixed incumbent applying predatory pricing but it noted that it is the competence of the SPRK to verify whether the fixed incumbent complies with its retail price control obligations as regards the voice telephony services included in the bundle and if there is a case of cross subsidy. In 2009, there was not any follow-up to this decision by the SPRK.

Broadcasting

Market situation

In July 2009, the Latvian TV broadcasting market had the following market shares by platform: 46.3% cable, 26.8% analogue terrestrial, 13.9% satellite, 4.1% IPTV and 0.4% digital terrestrial TV (DTTV). It is particular the market share of IPTV offered by the fixed incumbent, which shows a major increase since 2008. The DTTV service was started in March 2009 in the Riga area (using MPEG-4 encoding) and the nation-wide roll-out is expected to be completed in 2010.

Regulatory issues

Further to the selection procedure organised by the Ministry of Transport at the end of 2008, in January 2009, the Government endorsed the selection of the fixed incumbent as the provider of DTTV broadcasts. In accordance with the selection decision, the National TV and Radio Council granted to the winner the rights to use the 174 – 230 MHz and the 470 – 862

MHz frequency bands for digital broadcasts until 31 December 2013, but there currently are parallel rights of use of the analogue broadcasters. As from 2013, the SPRK, rather than the National TV and Radio Council, will deal with the assignment of the broadcasting frequencies. A possible use of a part of these frequencies (digital dividend) not required for digital broadcasts is not on the agenda of the Latvian authorities at the moment. According to them, such use is also prevented by the likely interference problems in border areas with Latvia's non-EU neighbours the Russian Federation and Belarus where analogue switch-off is scheduled only around 2015.

The originally planned switch-off date of analogue broadcasts was end 2011 but, in view of the progress in DTTV coverage, it is likely to happen in the first half of 2010 as many national TV channels announced their intention to terminate analogue transmission earlier as a cost saving measure. In the absence of plans to provide aid to end-users for acquiring digital TV decoders, this accelerated move to digital-only broadcasting raised concerns about its impact on a potentially significant share of rural population, which currently use analogue terrestrial TV. Since the main driver for this accelerated switch-over process is the broadcasting transmission charges applied to TV channels by the broadcasting transmission provider, a State-owned company controlled by the Ministry of Transport, also the cost of implementing DTTV came under active public scrutiny at the end of 2009.

Horizontal regulation

Spectrum management

A new national frequency allocation plan was adopted in October 2009 providing in particular for the liberalisation of the 900 MHz band to enable UMTS as foreseen by Directive 2009/114/EC adopted on 16 September 2009, which amended the GSM Directive of 1987. The 2.6 GHz band was, on the other hand, reserved for the wireless TV (MMDS) until the end of 2013. The 2300 – 2370 MHz band will be frozen for two years, after which it will be enabled for IMT systems and a beauty contest will be organised to assign the rights of use. In 2008, SPRK already granted the rights of use to this band to ten undertakings. However, none of the assignees was able to use it since the ESD did not issue the required authorisations for installing radio equipment to provide services in this band. According to operators, this case demonstrated that the co-ordination between the authorities involved in radio spectrum management did not work well.

In 2009, SPRK organised beauty contests for the rights of use in the 28 – 29 GHz and the 31 – 33 GHz bands where the rights of use were assigned to the single applicant in each procedure. In 2009, the SPRK issued new rules on the use of frequencies, which incorporate the national authorisation procedure for the EU-selected providers of mobile satellite services (MSS). These revised rules also provide for a possibility to impose additional conditions at the moment of extension of the rights of use, such as coverage, which are quite important in the Latvian situation since there are no fees for the use of frequencies. These SPRK rules formally provide for spectrum trading, but it is limited only to the rights of use for those frequency bands, which are not subject to selection procedure and which any operator can anyway receive without restriction by simply applying to the SPRK.

Implementation of spectrum decisions

Following the adoption of the new national frequency allocation plan in October, Latvian authorities stated that this new plan implements radio spectrum harmonisation Decisions 2008/432/EC (amending Decision 2006/771/EC), 2006/804/EC, 2007/131/EC, 2007/90/EC (amending decision 2005/513EC), 2007/98/EC, 2008/294/EC, 2008/411/EC, 2008/477/EC, 2008/671/EC and 2008/673/EC (amending decision 2005/928/EC). The conformity of the

new provisions with these radio spectrum decisions is being assessed by the Commission services. The implementation of Decision 2007/344/EC on the harmonised availability of information regarding spectrum had not been notified to the Commission by the end of 2009.

Rights of way and facility sharing

Further to the amendments of June 2009 to the Law on Regulators on Public Utilities, the SPRK acquired the right to regulate access to infrastructure for the provision of regulated services, including electronic communications services.

Since 2008, the ESD is also charged with the review and authorisation of construction projects for rolling out electronic communications networks as well as with control functions in this area. Also in 2009 many operators continued to view ESD's involvement in these matters as an additional formality, which does not provide any added value, since they still have to deal with the local public authorities regarding their network construction projects.

There is also still no regulation concerning the charging for these ESD's activities. For the moment, its work in this area is being financed mostly from the electromagnetic compatibility (EMC) charges. However, a new 'price list' was in preparation for adoption by the Cabinet of Ministers and was expected to be published for consultation along with the methodology. In addition, ESD offered to operators to sign voluntary contracts on 'co-operation' in this area, according to which they pay charges set by the ESD. Some of the large operators agreed to these contracts in 2009 while others awaited a Government decision.

The Commission services are following carefully the developments in Latvia in this respect.

In May 2009, amendments to the Code of Administrative Offences were adopted providing for sanctions in case of breaching the rules governing installation of telecoms facilities, which are to be enforced by the ESD. So far, the control activity in this area has been limited and unauthorised roll-out of aerial cables is quite common in the cities. However, there were indications that some municipalities, including Riga, had intention to step up enforcement in this area.

Administrative charges

A major development in 2009 was the Government's decision in August to charge annual fees for the rights of use of the 3-5 digit short numbers (codes), including carrier selection codes. The fee ranges from 510 to 7500 LVL per year (about €730 – €10700). As a result of this decision, numerous undertakings applied to SPRK to cancel the rights of use to the short codes assigned to them.

The administrative costs of both the SPRK and ESD are financed from administrative charges. As regards SPRK, the Cabinet of Ministers reduced, in December 2008, the rate of the charge from 0.2% to 0.17% of operators' annual turnover in 2009. The costs of the ESD are financed from the administrative charges for the provision of EMC, the rates of which are established by the Cabinet of Ministers in a detailed manner per type of communication service and radio channel and per type of radio equipment installed.

The last revision of these charges took place in 2007 resulting in a significant increase of the rates for the use of certain radio channels. Following a complaint from a Latvian undertaking, in June 2009, the Commission launched an infringement proceeding against Latvia over concerns that the more than six-fold (compared to the previous rate enacted in December 2006) increase of the EMC rate in relation to narrowband multi-channel mobile radio networks (TETRA) as well as the discounts on EMC charges granted to certain undertakings did not comply with the Authorisation Directive, which requires administrative charges to be imposed in an objective, transparent and proportionate manner.

Furthermore, it should be noted that, apart from ensuring EMC, the ESD also has several other tasks, such as the maintenance of a numbering database, the caller location database and the authorisation of the civil works. These functions have so far been financed by the EMC charges although the State budget for 2010 allocates specific resources to the ESD for maintaining the numbering database.

The Commission services are following carefully the developments in Latvia in this respect.

THE CONSUMER INTEREST

Tariff transparency and quality of service

In view of the significant share of consumer complains related to broadband services the SPRK introduced in 2009 a new IT system for consumers to test their broadband speeds, which had turned out to be quite popular.

Universal service

In 2009, the fixed incumbent remained the provider of universal service (US) in Latvia, following the last extension of its designation by the SPRK in 2008 until the establishment of a universal service compensation mechanism. Although the setting up of such a mechanism was required by the Electronic Communications Law already several years ago, it still has not been implemented and there was no progress in this respect in 2009.

Until the establishment of the fund, the compensation to the US provider is to be paid from the budget. The SPRK has found an unfair burden in the provision of US in 2006-2007 but no compensation has been paid to the US provider. In August 2009, the SPRK found an unfair burden also in the provision of US during 2008 and confirmed the provider's request for compensation in the amount of approx. 380 000 LVL (€540 000). Thanks to the exclusion of access from the range of services subject to compensation, this is significantly less than approx 2 million LVL (2.9 million €) approved for the previous year 2007. The net cost is mostly due to the provision of public pay telephones. On the other hand, the provision of social tariff options and of the comprehensive directory and directory inquiry service was profitable for the US provider.

In December 2009, SPRK adopted a decision amending the scope of the US by replacing the previous US obligations in relation to disabled users with an obligation to provide such users with free of charge installation of new lines, including broadband lines, 75% discount on monthly subscription, 20% discount on local calls and a 8.65 LVL (about €12.35) discount on broadband subscriptions. As regards public pay telephones, SPRK obliged the US provider to maintain in service those pay telephones that are profitable and to get agreement on removal of loss-making pay telephones from the relevant local authorities or the hospitals, schools and social security establishments concerned. Due to the steep drop in call volumes, the fixed incumbent was reported to have drastically reduced the number of pay telephones in 2009 – from 2871 in January 2009 to 917 on 1 October 2009.

Users' access to the Internet and network management

Net neutrality was not reported to be an issue at the moment. According to mobile operators, they were not considering restricting mobile VoIP and also indicated that there is no evidence of an increasing use of mobile VoIP due to the low retail voice tariffs.

Number portability

The significant increase in mobile number portability, which started in 2008 continued in 2009. Between 1 January and 30 September 2009, 92 955 mobile numbers were ported

between operators. Also 14 192 fixed numbers were ported between operators during this period. According to SPRK, the time required for mobile and fixed number porting is 2.5 days, which is below the EU averages of 6.5 days in case of fixed and 4.1 days in case of mobile numbers, even though the legal time limit for number portability in Latvia remains 10 working days.

Number portability remains free of charge for both fixed and mobile customers. Initially there were also no charges at the wholesale level, but these have now been introduced by all operators and are the subject of disputes between the fixed incumbent and an alternative fixed operator and among all the mobile operators. The rate charged by the fixed incumbent is 6.02 LVL for a number ported out (about € 8.5), which SPRK found to be cost-oriented in 2008. In 2009, one alternative fixed operator appealed against this SPRK decision in the administrative court. At the same time the fixed incumbent sued the alternative operator in the civil court claiming the payment but the civil court stayed its proceedings pending the outcome of the litigation in the administrative court. Other fixed operators charge the fixed incumbent the same wholesale charge of 6.02 LVL (i.e. rates are reciprocal).

After wholesale charges for numbers ported out were introduced by the two established mobile operators (5.56 LVL/ €7.94 and 5.61 LVL/ €8.01, respectively), also the new GSM/UMTS entrant followed the suit in October 2009 by introducing a wholesale charge of 13.62 LVL/ €19.46. As the amounts of mutually unpaid bills were accumulating, the resolution of this long-standing dispute was clearly becoming a pressing issue for the mobile operators which appeared to wish the SRPK to resolve their dispute by setting the respective rates without further delay.

Consumer complaints

In Latvia, consumer complaints against operators can be reviewed by both the SPRK (except billing disputes) and the Consumer Rights Protection Centre. As of 1 October 2009, 111 consumer complaints had been lodged with the SPRK in 2009. Amendments adopted in May 2009 to the Consumer Rights Protection Law provided, among other things, that the Consumer Rights Protection Centre can refuse the investigation of a complaint that it does not deem to have caused a serious prejudice to the collective rights of consumers.

European emergency number 112

Since 2008, emergency services can acquire caller location information via a central location database run by the ESD. Upon request from the emergency services, this database requests caller location information from the relevant operator and makes it available to the emergency services. During 2009, one of the mobile operators upgraded its systems and now automatically forwards caller location information to the ESD for each 112 call.

112 is Latvia's sole number for calling emergency services from mobile phones. 112 calls are received by the call centres of the Fire and Rescue Service, which forward them to the competent emergency service where necessary. Fixed line users can call 112 but also have the possibility to call, for example, ambulance services or police directly by using their individual two-digit emergency numbers (which are not available from mobile phones). A public discussion was started during 2009 to make it possible also for mobile users to call the ambulance services directly as there were concerns about the delays in forwarding the 112 calls to them.

The awareness of 112 as the European emergency number remains low – according to the Eurobarometer Flash survey (February 2010), only 28% of the respondents in Latvia knew that they can call emergency services across the EU by using 112.

Harmonised numbers for harmonised services of social value (116)

The current national numbering plan adopted by the Government in August 2008 simplified the procedure for allocating the EU harmonised numbers in the '116' numbering range. Following a publication of a new harmonised number by the Ministry of Transport, it can be assigned by the SPRK to the operator (the publication function may, however, be transferred to another body taking into account the decision of the Latvian authorities to relieve the Ministry of Transport of its regulatory functions). So far only one number – 116111 – has been assigned and the service was started in 2009 by the State Inspectorate for Protection of Children's Rights.

ePrivacy

In June 2009, amendments were adopted to the Information Society Services Law, which softened the rules on direct marketing messages addressed to legal persons and provided that the national supervisory authority – the State Data Inspectorate – would only investigate complaints from natural persons in case of regular (meaning more than 10 during a year) receipt of unsolicited marketing messages sent by the same provider.

There is no requirement for mobile customers using pre-paid cards to register.

LITHUANIA

INTRODUCTION

In 2009, broadband infrastructure was further developed in Lithuania, in particular due to continuous deployment of fibre, and rapid expansion of a Worldwide Interoperability for Microwave Access (WiMAX) network. In the context of deteriorating economic conditions, consumers were able to profit from low prices for various electronic communication services. Nevertheless, fixed broadband penetration, and its rate of growth, were below the EU average for the second year in a row.

As regards the implementation of the EU regulatory framework, in response to formal action by the Commission, a country-wide solution for a 112 mobile caller location service was put in place in 2009. In contrast, effective separation of regulatory functions in the field of electronic communications from activities associated with ownership or control of providers of electronic communications networks or services, continued to be an issue. While Lithuanian authorities took some significant steps to improve terms and conditions of use of the incumbent's infrastructure, it appears that a more pro-active approach to the specification of market remedies, and their monitoring and enforcement, is needed, in order to allow alternative operators to compete with the incumbent on an equal footing.

REGULATORY ENVIRONMENT

Main regulatory developments

The legislative framework established by the Law on Electronic Communications did not change in Lithuania in 2009. Nevertheless, several important initiatives to change legal provisions were launched, in particular as regards the number of must-carry channels to be transmitted by cable companies and other television transmission service providers, and the limitation of construction of mobile antennas on top of residential and educational buildings.

Organisation of the NRA

The lack of effective structural separation of regulatory functions in the field of electronic communications from activities associated with ownership or control of providers of electronic communications networks or services, continued to be an issue in Lithuania in 2009. Most of the tasks of the national regulatory authority are performed by Ryšių reguliavimo tarnyba (RRT). However, the Ministry of Communications of the Republic of Lithuania (the Ministry) is directly involved in the procedures leading to the approval of the National Radio Frequency Allocation Table, as well as in the elaboration of regulations governing the provision of universal service in Lithuania. It also appears that the Ministry carries out activities associated with both ownership and control of providers of electronic communications networks or services, in particular where a company provides inter alia broadcasting transmission and wireless broadband. A reasoned opinion was sent to the Lithuanian authorities in June 2009 on the grounds that such a lack of effective structural separation was contrary to the requirements of Article 3(2) of the Framework Directive. According to the information available to the Commission services, the Government approved, in December 2009, the secondary legislation providing for the transfer of the regulatory functions to the Ministry of Internal Affairs. The Commission services are closely following the matter.

Following nine requests for dispute resolution submitted to RRT in 2008, only one such request was presented in 2009. This is partly explained by the fact that, at least for the smaller alternative operators, participating in formal dispute resolution procedures, and the associated evidence collection and submission activities, entails significant financial and human resources, even though the one-off dispute resolution fee charged by RRT itself is not significant. Making RRT's positions on specific issues public through the dedicated dispute resolution website might have contributed to the trend too.

Decision-making

In 2009, RRT carried out three new market analyses. Firstly, the third round analysis of the markets for fixed wholesale call termination as regards the incumbent and a second round analysis as regards the alternative operators. Secondly, the second round analysis of the markets for mobile wholesale call termination; and, thirdly, the second round analysis of the wholesale broadcasting transmission markets.

Lithuanian Administrative Courts have so far upheld all the RRT's market analysis decisions that had been challenged by market players, except for the one concerning the wholesale broadband access market where RRT was ordered to reconsider the remedies imposed. RRT is in the process of carrying out the second round analysis of the physical network infrastructure access (LLU) market.

RRT also proceeded with the implementation of the measures adopted under the earlier market analyses. In particular, in June 2009 RRT finalised the bottom-up long run average incremental cost (BU-LRAIC) model setting out in detail the price control obligation imposed on mobile operators as a result of the 2005 market analysis. In September 2009, RRT reduced price ceilings for digital leased lines.

Moreover, the incumbent published in 2009 several modified versions of access reference offers for different wholesale services. According to applicable regulations, any new reference offer is sent to RRT two months in advance of its entry into force. The draft is made public, and RRT is entitled to make comments, which it usually does.

Nevertheless, the alternative operators call on RRT to apply a more pro-active approach to the monitoring of compliance with the market remedies by the incumbent, to be accompanied, where necessary, by effective enforcement action and sizeable fines in particular, as provided for by the Law on Electronic Communications. This call is especially relevant in the context of reluctance by the national competition authority (NCA) to launch ex-post competition-law investigations in the electronic communications sector. As a matter of fact, following an appeal by an alternative operator against the NCA's refusal to investigate price squeeze issues and a protracted litigation, the Supreme Administrative Court of Lithuania obliged the NCA to undertake the investigation.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the Lithuanian electronic communications sector was €0.87 billion as of December 2008 (2.7% of GDP), representing an annual growth of 4.5%, significantly less than the annual growth of more than 10% during the previous year. Revenues from fixed markets were €166 million, and revenues from mobile markets were €573 million. Lithuanian operators reduced their rate of investment by as much as 20% in the period 2007 – 2008, to approximately €109 million, resulting in an investment over revenues ratio of 12.5%, below

the EU average of 14%. As of December 2008, the total value of investment by alternative operators was almost €23 million. Mobile operators invested close to €50 million (almost 40% less than in 2007), while the fixed incumbent invested approximately €37 million. According to RRT, lower investment figures can be explained by the cyclical nature of investments in the sector, as well as slowdown in the construction industry and the national economy in general. In 2009, some consolidation took place among both fixed voice and cable operators.

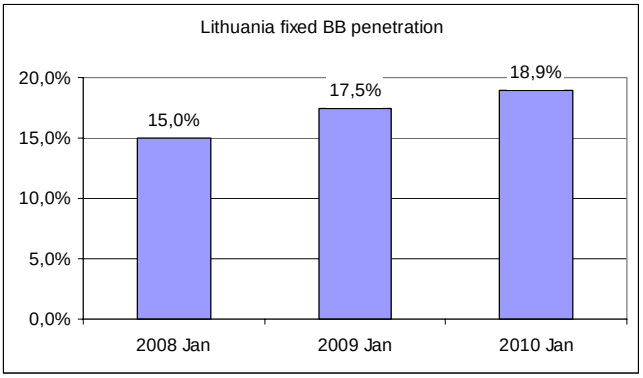
As of July 2009, just over 1.7% of the Lithuanian population were subscribers of bundled offers of electronic communication services (mainly double play). Some operators refer to the overall cost of bundled offers as the main reason why consumers are not keen to take them up. It appears that the bundled offers of the incumbent are not systematically monitored by RRT for their compliance with the market remedies.

The incumbent, Internet service providers, alternative and cable operators continued to deploy next generation networks (NGNs) - fibre to the home (FTTH) or fibre to the building (FTTB) - in 2009. A wireless network based on the WiMAX (Worldwide Interoperability for Microwave Access) technology, which was launched in three major cities by one of the 3.5 GHz spectrum assignees in 2008, extended at the end of 2009 to 17 Lithuanian cities and towns.

The first phase of deployment of the publicly funded rural fibre network (called RAIN) was completed in 2008, and has, reportedly, enabled operators to increase their network capacities. The Lithuanian authorities announced in December 2009 the second phase of the project, the major part (approximately 75%) of which would consist of laying fibre to the towers of mobile and WiMAX operators. The remaining part (approximately 25%) would consist of completing the rural public sector broadband connections, such as connection of libraries and schools. Upon completion of the project, access to broadband would be available to 98% of the population.

Broadband

Market situation



In January 2010, broadband penetration had reached approximately 18.9%, compared to approximately 17.5% in January 2009. Lithuania lags behind the EU average of 24.8%. Moreover, the rate of growth of broadband penetration was below the EU average in both 2008 and 2009. Fixed broadband services are delivered through a number of competing types of infrastructure, in particular DSL (approximately 36% of lines), fibre to the home or building (approximately 40% of lines) and cable (approximately 8% of lines). Up to 64% of broadband lines were provided using a non-DSL technology in January 2010, largely above the EU average of 21%. The penetration of mobile dedicated data service cards, modems or keys stood at 4.8%, slightly below the EU average of 5.2%. The broadband market share of the fixed incumbent fell slightly from 50% in January 2009 to 49% in January 2010, but remained above the EU average of 45%. Moreover, the incumbent's DSL share was

as high as 99%. In January 2010, 37% of all fixed broadband lines allowed speeds up to 2 Mbps, whereas around 26% of lines were enabled with speeds of 10 Mbps or more. Lithuania obtained some top ten rankings in several recent studies focusing on quality of broadband or penetration of fibre to the home (FTTH).

Regulatory issues

In the context of the legal challenge by the incumbent against RRT's formal dispute resolution decision on local loop unbundling (LLU), adopted in 2007, some improvements of the terms and conditions of LLU were agreed to by the incumbent in April 2009. In particular, the incumbent's LLU reference offer was changed to shorten the period of investigation and confirmation of service availability from 30 calendar days to 10 working days, and to reduce the LLU prices and charges. Firstly, the one-off technical investigation charge and the installation charge were reduced, resulting in the overall full LLU connection charge of almost € 77 in October 2009, substantially below the connection charge of almost € 140 one year earlier, but still above the EU average of approximately € 43. Secondly, the monthly rental price for fully unbundled local loops was reduced to approximately € 7, below the EU average of approximately € 8.6 in October 2009. As regards shared access, the connection charge was also reduced to almost € 77 (compared to more than € 140 in October 2008), but remained above the EU average of approximately € 46. The monthly rental price did not change and was € 5.5 in October 2009, largely above the EU average of € 2.2.

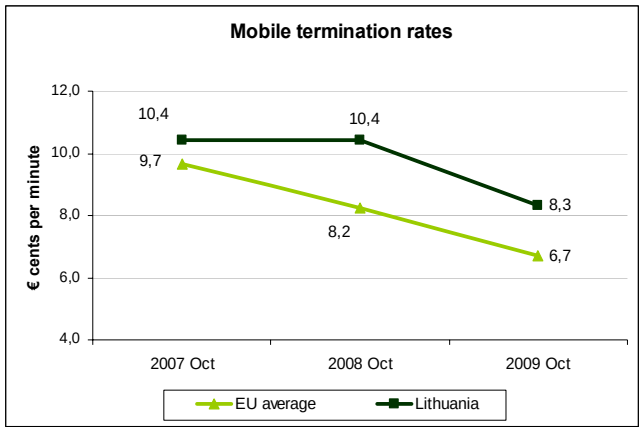
Despite these changes, LLU is used in Lithuania to a very limited extent – only 40 shared lines were in use at the retail level for broadband access in January 2010, and some further LLU lines were, reportedly, used for the provision of data transmission services. The number of retail broadband lines based on bitstream was also as low as 1606 in January 2010, down from 2282 in January 2009. These numbers can be partly explained by the fact that many competitors of the incumbent have their own networks. Nevertheless, in the context of relatively low retail prices for electronic communication services, the terms and conditions of use of LLU, in particular, appear to be not attractive enough for the alternative operators.

Mobile

Market situation

The mobile sector has remained the leader in terms of revenue generation, accumulating as much as 66% of total electronic communications sector revenues. The mobile penetration rate fell slightly from 148.9% in October 2008 to 147.3% in October 2009, reportedly due to the removal of inactive users from the operators' databases, but remained largely above the EU average of 121.9%. The market shares of the three mobile operators were approximately 40%, 38% and 22% in October 2009, almost identical to the situation one year earlier. The price for mobile voice communications fell further in Lithuania to €0.05 per minute, which compares favourably to the EU average of €0.13. The annual average revenue per user was one of the lowest in the EU as of December 2008, at approximately €115, compared to the European average of approximately €323.

Regulatory issues



In June 2009, RRT finalised the bottom-up long run average incremental cost (BU-LRAIC) model setting out in detail the price control obligation imposed on mobile operators as a result of the 2005 market analysis. In particular, the modelled target termination rate is 1.60 €-cents. Moreover, according to the transitional measures decided by RRT in November 2008, the glide path, consisting of 20% annual reductions, was applied in 2009. As of October 2009, this resulted in the national average mobile termination rate of 8.30 €-cents, still above the EU average of 6.70 €-cents.

In September 2009, RRT notified to the Commission the second round analysis of the markets for mobile wholesale call termination. Building on its 2005 decision that provided for the annual reductions of *at least* 20%, RRT proposed to accelerate the reduction of mobile termination rates, starting already on 1 January 2010. This was fiercely contested by one of the mobile operators, in particular due to the short period of time to prepare for a bigger reduction than originally planned, and the unfavourable economic context. However, both alternative fixed operators and the incumbent were critical of persisting high mobile termination rates that are in sharp contrast with very low retail prices for mobile communication services. In view of substantial reduction of mobile termination rates as a result of this proposal, RRT also set out a possibility to grant a transitional period for reaching efficient cost based termination rates by July 2014 at the latest. The Commission, in the comments letter, pointed out that according to its Recommendation on Termination Rates, termination charges should be set at the level of efficient costs by 31 December 2012 and no further transitional periods for reaching cost based mobile termination rates should be allowed. RRT's final decision of December 2009 provided for the reduction of mobile termination rates by 37% as of 1 January 2010. Moreover, it envisaged no transitional periods beyond 31 December 2012 and introduced measures to reduce the cost of setting-up interconnection with mobile operators which is expected to benefit alternative operators.

Roaming Regulation

All Lithuanian mobile operators complied duly and on time with the European Regulation (EC) No 544/2009 of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services. In most cases the retail prices were set at or very close to the maximum level indicated by the Regulation.

Fixed

Market situation

The incumbent's market share in the fixed telephony market (all types of calls) by retail revenue was 92% in December 2008, one of the highest in the EU and the same as one year

earlier. The market share by volume of traffic of the Lithuanian managed VoIP providers increased slightly from approximately 1.7% in December 2007 to more than 2% in December 2008, however remained far below the EU average of 14.5%. Approximately 6.1% of subscribers used an alternative provider to make and receive fixed national calls in July 2009, a slight increase compared to 4.9% in July 2008. All the alternative operators that are currently offering public voice telephony through direct access are using their own proprietary infrastructure. These operators make up 56% of all alternative operators. In 2009, consumer and business prices of fixed communication services decreased in Lithuania.

Regulatory issues

The hybrid long run average incremental cost (HY-LRAIC) model is used to determine cost-oriented fixed termination rates in Lithuania. Comparing October 2009 to October 2008, neither the rate for local level interconnection (at 1.60 €-cents) nor the rate for double transit (at 2.10 €-cents) changed. These termination charges, therefore, remained among the highest in the EU.

In September 2009, RRT notified to the Commission new market analysis concerning the markets for fixed wholesale call termination: the third round analysis as regards the incumbent, and the second round analysis as regards the alternative operators. In particular, RRT proposed to impose on the alternative operators a price control obligation according to which they would be obliged to apply prices of call termination on their respective networks that are not higher than the prices of call termination applied by the incumbent implementing the price control set by RRT. Previously, no price control measures applied to the alternative operators. RRT also proposed a new glide path for the reduction of the incumbent's termination charges. The Commission, in its comments letter, noted that both the current and target level of termination rates remained high in comparison to the EU average for incumbent operators in 2008, and consequently urged RRT to impose steeper reductions leading to rates closer to the EU average and the level of an efficient operator. This would avoid unduly steep glide paths at the end of the transitional period provided for in the Commission's Recommendation on Termination Rates. Moreover, with regard to RRT's proposal to adapt access obligations, based on which operators cannot refuse to provide access to competitors who charge the same or lower termination fees, the Commission emphasised that access obligations are unilateral and unconditional by nature, and should, in principle, not be subject to conditions prevailing on markets other than the relevant market. RRT's final decisions of December 2009 set out, in particular, the obligation to apply symmetric rates for the alternative operators and a new glide path for the incumbent aiming at reducing the gap between mobile and fixed termination rates.

The requirement to apply symmetric termination rates was imposed by RRT on the alternative operators already in April 2009, as a provisional measure. According to RRT, this was necessary in view of the failure of the market players to agree. Nevertheless, it appears that this particular decision undermined the efforts of the alternative operators to complete the negotiations with the incumbent on better terms and conditions of interconnection.

The reported issues as regards the establishment and maintenance of interconnection points included, in particular, the requirement that alternative operators buy from the incumbent interconnection links of a specified capacity, and the distribution of costs of other interconnection equipment. These issues in fact made the overall interconnection cost asymmetric in favour of the incumbent. By its final fixed termination market analysis decisions referred to above, RRT imposed an obligation on operators to cover their own costs

of interconnection equipment (e.g. 2 Mbps ports) and installation works in their networks as well as to share equally the costs of interconnection links. These measures are expected to reduce the interconnection costs for the alternative operators.

Moreover, the alternative operators reported some new issues, such as the incumbent's refusal to terminate calls to '800' numbers, where they would expect timely resolution by RRT.

Broadcasting

Market situation

While the market share of cable television was close to 30% of Lithuanian households in July 2009, approximately 3.5% of households were using Internet protocol television (IPTV) services, whereas satellite television and digital terrestrial television (DTTV) each served close to 5% of Lithuanian households. Nevertheless, 58% of households still relied on analogue terrestrial television in July 2009 in Lithuania.

Two DTTV networks are operated by the analogue broadcasting transmission incumbent, and the other two by the fixed incumbent in Lithuania. Each network allows for the broadcasting of 10 digital programmes. All networks are already in service and together cover approximately 95% of the population.

Regulatory issues

The date set by the Government of Lithuania for the switch-off of analogue broadcasting is 29 October 2012 and is conditional upon at least 90% of Lithuanian households being in a position to receive, using any of the digital broadcasting technologies, all the free-of-charge terrestrial TV programmes (both national and local).

The Government is contemplating two types of measures in order to speed up the switch-over from analogue to digital television: financing of digital television receiving equipment for low-income households, and an information campaign. Both measures would be technology neutral.

As regards wholesale broadcasting transmission services provided by the broadcasting transmission incumbent, designated as an SMP (significant market power) operator in 2007, RRT took, in 2009, measures obliging it to make publicly available the discounts for regulated products and apply them on a non-discriminatory basis.

In December 2009, RRT notified to the Commission the second round analysis of the wholesale broadcasting transmission markets covering the analogue and digital terrestrial radio and television broadcasting transmission markets, as well as cable radio and television broadcasting transmission markets.

Horizontal regulation

Spectrum management

As regards refarming of the 'GSM spectrum' in accordance with Directive 2009/114/EC amending Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community, the Lithuanian authorities were planning to take the necessary implementing measures at the beginning of 2010.

The Lithuanian authorities have also started making plans as regards the digital dividend to become available after 2012. In particular, the first priority would be more DTTV channels, including high-definition television (HDTV) channels. One platform in the 790-862 MHz band could be allocated for mobile services (mobile TV, mobile broadband), subject to cross-border coordination issues with non-EU countries being addressed.

Implementation of spectrum decisions

Based on the Plan on the Usage of Radio Frequencies, as periodically updated, and the List of Radio Frequencies/Channels That May Be Used Without an Individual Authorisation, approved by RRT, all the Commission's radio spectrum harmonisation decisions, adopted by the end of 2008, have been implemented.

Nevertheless, in October 2009 the Commission services wrote to the Lithuanian authorities requesting clarifications concerning the way how two Commission spectrum harmonisation decisions were implemented. In particular, as regards Commission Decision 2008/411/EC on the harmonisation of the 3400 - 3800 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community, the Commission services raised the issue that the allocation for mobile services had only a secondary status, whereas Decision 2008/411/EC allows both fixed and mobile services with the same status. As regards Commission Decision 2008/477/EC on the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Community, the Commission services noted, in particular, that it was not clear if and how the current use of the band by multichannel multipoint distribution services (MMDS) will continue.

In its reply of December 2009 RRT observed that two or three new operators can be accommodated in the 2500-2690 MHz frequency band while continuing the MMDS service in the 2572-2620 MHz sub-band, a solution considered by RRT as complying with the requirements of Decision 2008/477/EC. As regards Decision 2008/411/EC, RRT explained that until November 2010 the secondary status of the allocation for mobile services is due to the regulations of the International Telecommunications Union (ITU). Nevertheless, according to RRT, the 3400 - 3600 MHz frequency band is already in use on the technology and service neutral basis, in line with Decision 2008/411/EC. RRT also referred to the plans for modification or adoption of secondary legislation concerning the two Commission Decisions in order to foster legal clarity of the harmonisation process in Lithuania. At the time of writing this report, the Commission services were examining the reply from the Lithuanian authorities.

Rights of way and facility sharing

While a symmetric duct access obligation was established by the Lithuanian law already in 2005, several issues concerning access to the incumbent's ducts persisted, reportedly, in 2009. They concern, in particular, delays by the incumbent in dealing with access requests as well as a high rate of negative replies motivated, in the majority of cases, by the lack of physical capacity. The incumbent, on the other hand, considers that duct access is cheaper in Lithuania than in the neighbouring countries and that its refusals of access are objectively justified.

In 2009, Lithuanian institutions took some steps to improve the rules regulating construction of ducts. Specifically, secondary legislation was changed to require that ducts of at least 120 mm diameter are laid to blocks of apartments. Another change made electronic communications infrastructure a mandatory part of a construction project, just as is the case with other types of infrastructure.

Moreover, some disputes, in particular a case concerning the increase of access tariffs, were decided by RRT against the incumbent. RRT is also working on a methodology that will deal with technical aspects of granting or refusing access to ducts. Finally, RRT is investigating a possibility of creating an electronic map of duct routes and is going to launch a section on infrastructure sharing on its website.

Administrative charges

It appears from RRT's latest annual activity report and the financial balance sheet that, for the year 2008, the difference (surplus) between the administrative charges collected by RRT and its administrative costs was approximately 3 million Lithuanian litas (approximately € 0.87 million). It also appears that in May 2009 the Lithuanian Parliament adopted a budget law attributing an amount of RRT's administrative revenues corresponding to this surplus for the general budget needs of 2009, thereby preventing RRT from reducing its administrative charges for the year 2009. Following concerns expressed by operators, the Commission services are looking into the matter, in particular in order to determine whether such attribution is in compliance with the requirement of the EU regulatory framework that appropriate adjustments should be made in the light of the difference between the total sum of the charges and the administrative costs.

THE CONSUMER INTEREST

Tariff transparency and quality of service

In February 2009, RRT changed its Rules on the Provision of Electronic Communication Services, in particular by introducing two new requirements for service providers. Firstly, service providers have to specify in a contract or their standard terms and conditions the difference in price of subsidised handset if sold without the contract as well as the period and method of compensation of such difference in case the handset is subsidised. Secondly, service providers have to ensure that the waiting time is free of charge in case of paid information or services by phone. Moreover, as in previous years, tariff transparency continued to be enhanced by RRT's consumer-dedicated price comparison website in Lithuania.

Universal service

In June 2009, RRT modified its regulations concerning payphones by reducing the required density of payphones: from 1.3 to 0.5 payphones per one thousand inhabitants in cities, and from 0.5 to 0.2 payphones per one thousand inhabitants in other residential areas. This is justified, in particular, by the high degree of fixed-to-mobile substitution.

Users' access to the Internet and network management

While the incumbent was not applying any Internet traffic limitations or management techniques in 2009, the mobile operators either considered or actually applied fair network usage policies according to which the Internet speed would be reduced once certain threshold defined in terms of quantity of data was exceeded. At the same time, unlimited Internet usage offers by mobile operators were available in Lithuania.

Number portability

More than 90 000 mobile number portings (transactions) took place between January and end of September 2009, compared to approximately 4 000 fixed number portings (transactions). In Lithuania the maximum time needed to port a fixed or a mobile number is five days, below the EU average of 6.5 days for fixed numbers, but above the EU average of 4.1 days for mobile numbers.

European emergency number 112

Mobile caller location information for calls to the European emergency number 112 is provided, as of 16 September 2009, to authorities handling emergencies by all three mobile operators and for the whole territory of Lithuania.

This follows the measures taken by the Lithuanian authorities in response to an infringement case and, in particular, the Judgment of 11 September 2008 of the Court of Justice of the European Communities that, by not ensuring in practice that authorities handling emergencies are, to the extent technically feasible, given caller location information for all callers to the single European emergency call number '112' when public telephone networks are used, the Republic of Lithuania had failed to fulfil its obligations under Article 26(3) of the Universal Service Directive.

According to a recent study[170], majority of respondents in Lithuania (51%) reported having received information about 112 as the European emergency number in the past 12 months. Consequently, there has been a significant increase in the number of respondents who now know 112 as the European emergency number from 43% in 2009 to 48% in 2010.

Harmonised numbers for harmonised services of social value (116)

The numbering range beginning with '116' has been reserved for harmonised services of social value in the Lithuanian numbering plan. In April 2009, RRT announced the winners of the tenders for the use of two '116' numbers. 116111 will be used by the State Child Rights Protection and Adoption Service for a child helpline, and 116123 will be used by the Lithuanian Association of Phone Psychological Assistance Services for an emotional support

[170] Eurobarometer Flash survey on the European emergency number 112 (February 2010).

helpline. As regards the number 116000 reserved for establishing a hotline for missing children, RRT intended to carry out a new tender, following the termination of the first tender in 2008 owing to lack of interest.

Must Carry

Legislative changes have been proposed in Lithuania, whereby only two television channels of the national public TV broadcaster would have the must-carry status. The current must-carry obligation consists of approximately twelve TV channels. Some network operators do not support the reform, because it would imply that operators have to pay for the re-broadcasting rights as regards the other two national (commercial) TV channels that would remain outside the scope of must-carry obligation.

Data protection

Following the opening of infringement proceedings, the Lithuanian Parliament adopted the amendments to the Law on Electronic Communications that transpose the Data Retention Directive (2006/24/EC), in November 2008. The amendments entered into force in March 2009. The Ministry is preparing drafts of Government decrees implementing the data retention legislation.

RRT approved the Regulations of the national electronic communications network and information security investigation service (CERT-LT) on 20 March 2009. According to its statistics concerning the investigations carried out in the third quarter of 2009, most of the reported security incidents concerned viruses and worms (approximately 97%), followed by illegal content (0.4%) and spam (0.4%).

LUXEMBOURG

INTRODUCTION

Broadband penetration continued to increase in 2009. In the mobile sector, the incumbent confirmed its strong position, while reinforcing its predominance in the broadband and fixed sectors thanks to its bundled offerings that became a standard on the residential market, and continued to grow on the corporate market. IPTV has become a common product in the incumbent's marketing. Alternative operators using the incumbent's wholesale line rental are forced to operate with a small margin in order to remain competitive, whereas they are not able to offer a competitive IPTV service.

The National Regulatory Authority (NRA) did not take any major decision on the regulation of markets in 2009. So far, the incumbent has provided alternative operators neither with optical fibre nor with VDSL access. There are increasing concerns regarding the migration to next generation networks (NGN), in particular with respect to the availability and the conditions of access to NGN by alternative operators, and the timeliness of desirable regulatory remedies. The discussed merger of the mobile and fixed divisions of the incumbent, and the existing lack of accounting separation of individual divisions of the incumbent, raise doubts as to their potential impact on effective competition. The incumbent's accounts are now available on its webpage, although only the accounts up until the year 2006.

REGULATORY ENVIRONMENT

Main regulatory developments

Neither the legislator nor the Luxembourg NRA, the *Institut Luxembourgeois de Régulation* (ILR) adopted any regulatory measure that would significantly change market conditions. The NRA did not notify any market analysis to the Commission in 2009.

Organisation of the NRA

Generally speaking, the perception of alternative operators is that the ILR is acting independently. The infringement proceedings launched by the Commission in January 2008 on the grounds of a lack of effective structural separation required between the regulatory functions and those functions associated with the ownership or control of undertakings providing electronic communications networks and services were closed in early 2009 following the implementation of structural changes in the Luxembourgish administration.

In order to overcome its limited resources, the ILR hired an expert in 2009, who has experience from the Belgian regulatory authority. Structurally, a new legislative measure entered into force, under which the ILR's personnel will be increased in the course of the following years starting in 2010. It should be noted that the ILR is in charge of several economic sectors: electronic communications networks and services, electric energy transport and distribution, natural gas transport and distribution, postal services and, with the future adoption of the appropriate law, rail networks.

The ILR has been granted power under article 108bis of the Constitution to take "*règlements grand-ducaux*", where the measure is addressed to non-individually defined persons, as

opposed to decisions addressed individually. Both règlements and decisions can be contested before administrative Courts.

The cooperation between the ILR and the Luxembourgish competition authority (*Conseil de la concurrence*) does not seem to raise any concerns, the issue of the incumbent's IPTV offer being a recent case they cooperated on.

Decision-making

The ILR has started the delayed second round of market analyses with public consultations, focusing on the market for wholesale physical network infrastructure access (LLU) and the market for wholesale broadband access. Operators expressed their criticism with respect to current regulatory loopholes.

On the enforcement side, in March 2009 the ILR took a decision against the incumbent, temporarily banning the commercial exploitation of services based on the VDSLx standard, as a sanction for delays in submitting proposals for reference offers for 2009 and 2010. This ban included all retail services of the incumbent, and ended on 31 December 2009.

Alternative operators have access neither to optical fibre nor to VDSL of the incumbent. This question is crucial for their competitiveness in the future, but also in the present, since a number of commercial zones in Luxembourg already are equipped only with fibre infrastructure. Alternative operators express concerns that the remedies may come at a point when it will be difficult to compete with the incumbent, which will since long be established on the fibre access market. While the second round of market analyses may address access to optical fibre, the ILR prefers to finalise its other pending issues. The incumbent has published an offer that was subject to consultations in 2009.

Certain alternative operators claim that the incumbent's plans for deploying fibre network are not transparent. Some of them also disapprove of the architecture the incumbent has chosen for the deployment of its fibre network in 30 000 households so far (Gigabit Passive Optical Networking - GPON), which would not allow for effective competition on such a network in the future.

MARKET AND REGULATORY DEVELOPMENTS

The total revenues of the Luxembourg electronic communications sector were €506 million as of 31 December 2008. The total value of tangible investments in electronic communications networks in 2008 was €121 million, 26% more than in 2007. The incumbent invested approximately €89 million in fixed telephony networks, while alternative operators invested only around €7 million. The investments by mobile operators amounted to €25 million in 2008, an increase of €4 million, compared to previous year's figure.

The operator that was created in 2006 to promote dark fibre from 2008 and that is wholly owned by the State of Luxembourg became operational in June 2009. Its mission is to build and operate national and international fibre networks, and Internet related data and access centres in order to increase Luxembourg’s IP connectivity. Presented as part of a package of measures to address the economic downturn, the government has decided to accelerate the development of the infrastructure and decided that the new operator should invest €100 million in the coming three years. Several operators use the dark fibre and data centers of the new operator to provide their services, including one new operator on the retail market that

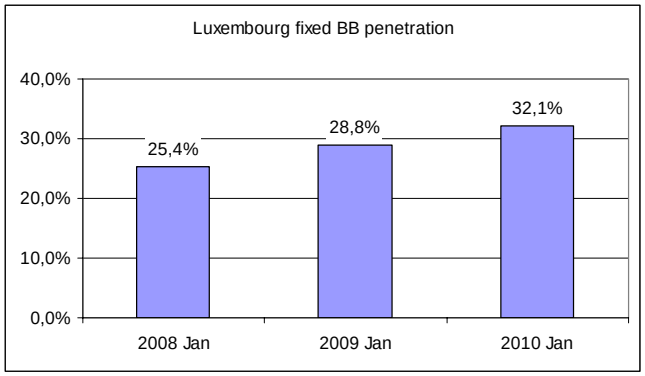
entered the corporate market. As regards the fixed incumbent operator, it was to invest €74 million more in fibre in 2009 than initially envisaged, as the State renounced its 2009 dividends. According to the governmental plan, the complete FTTH coverage in Luxembourg should be reached by 2018.

Alternative operators criticised the incumbent's "all-in-one-shops" combining postal and financial services with electronic communications services which, arguably, is considered as bringing the incumbent into frequent contact with many potential clients.

The consumers in Luxembourg increasingly opt for bundled offers combining television, broadband and fixed telephony and less often also mobile. As of December 2008, almost 23% of the population used bundled offers.

Broadband

Market situation



Luxembourg's broadband penetration rate increased by 3.3 percentage points since January 2009 and reached 32.1% in January 2010, which is well above the EU-27 average of 24.8%. It has the third highest broadband penetration rate of the EU. The incumbent's share of the broadband DSL lines stayed almost unchanged at 79.7% as of January 2010 compared to 80% as of January 2009. The market share of the alternative operators' DSL lines has increased slightly and reached 20.3% in January 2010, which represents an increase of 0.3 percentage point since January 2009.

The incumbent had 67.2% market share (76.1% if resale of lines of alternative operators is included) of broadband lines in comparison with alternative operators' broadband lines market share of 32.8% in January 2010. The number of resale DSL lines represented 52.8% of the total of the alternative operators' DSL lines. In January 2010, 92.1% of the connections were offering speed between 2 MBps and 10 MBps, while the remaining 7.9% were offering more than 10 MBps.

As regards the LLU retail access market, the number of fully unbundled lines supplied to alternative operators continued its increase, reaching 12 604 as of January 2010, in comparison to 10 170 lines as of January 2009. The cost-orientation obligation has not yet been implemented in Luxembourg. The price charged for LLU has not changed from last year and the connection fee remains high, for both full LLU (€91.1) and shared access (€157.4) as at October 2009. Alternative operators have been requesting since several years that this connection fee be brought closer to the EU average (i.e. €43.3 for full LLU and €46.4 for shared access).

Regulatory issues

In December 2008, the ILR extended the validity period of the incumbent's reference unbundling offer (RUO) and reference collocation offer (RCO) for 2007-2008 beyond 31

December 2008, for an unspecified period of time. In April 2009 the ILR modified certain service levels for LLU, concerning in particular the provisioning time for delivery of LLU by the incumbent, and re-establishment time in case of faults. The incumbent does not have an obligation to propose access to its fibre network, since it is not included in RUO 2007-2008. The draft RUO and RCO 2009-2010 were subject to public consultations in 2009. The ILR explained the delays by late submission of the incumbent's proposals. The ILR aims at first to determine the labour cost per hour that will also serve for other market analyses.

In March 2009 the ILR modified its regulation concerning the wholesale broadband access market by imposing on the incumbent the obligation to set up cost-oriented tariffs on the basis of a cost-model of an efficient operator in situations, where the absence of retail price does not enable it to calculate the "retail minus" rate. Although the Commission had encouraged the ILR to implement the cost-orientation obligation, the ILR claimed that in the absence of an appropriate cost model this obligation would not ensure avoidance of excessive wholesale rates, and preferred to use "retail minus" rates wherever possible.

The Reference DSL Offer (RDSLO) 2009-2010 was subject to public consultations in 2009. Alternative operators criticised the proposed tariffs, and demanded a higher number of different profiles in order to be able to offer more than mere reselling of the incumbent's retail services. They also called for cost-oriented tariffs, but the incumbent insisted on the "retail minus" rate. Alternative operators in 2009 continued to regret non-existence of a regulated bitstream offer. However, RDSLO should be technologically neutral so that it should be applicable also to bitstream and VDSL. On the other hand, the incumbent refused that the offer should comprise IPTV. Alternative operators would have liked to resell Ethernet based services to their customers, but they did not consider the incumbent's commercial proposal economically viable.

Mobile

Market situation

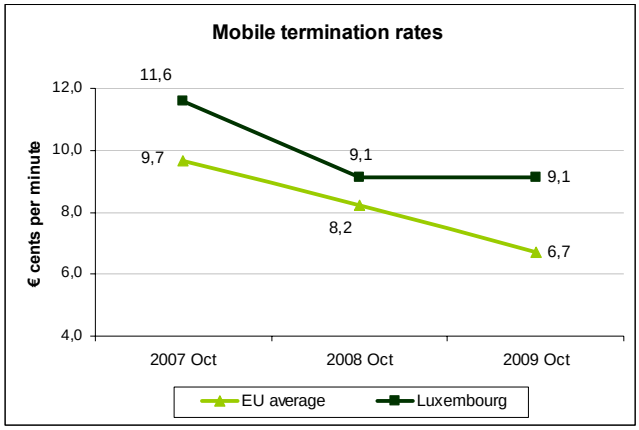
As of October 2009, the penetration rate for mobile was 142.1%, the same as the last year's figure and well above the EU average of 121.9%. As of 1 October 2009, the number of mobile subscribers was approximately 701 000, with 39.3% pre-paid subscribers and 60.7% monthly paid subscribers.

Generally speaking, the sector can be characterised as quite competitive. The incumbent has a strong position on the market, based on traffic, while the first and second competitors' market shares are increasing.

The penetration rate for mobile broadband based on data cards was rather low at 1.3% as of January 2010 (the EU average being 5.2%). The second and third mobile operators, having new shareholders, have announced increased investment and new products in order to compete with the incumbent. Owing to non-exclusive distribution of specific types of smart phones in Luxembourg by all three operators, the traffic of data increased tenfold in 2008, according to the incumbent. However, voice still generates the main part of revenues.

Regulatory issues

The two licensees which were granted 3G licences in 2008 are not yet operational. The licence conditions do not contain strict obligations for the operators in terms of coverage.



While the ILR's decision of May 2006 set out the glide-path for mobile termination rates with the last cap reduction in July 2008, no new caps have been introduced since, neither has the ILR developed a new method that was expected to replace the previously used international benchmarking.

Roaming Regulation

According to operators, the Roaming Regulation has had an impact in Luxembourg given that roaming is often used by the consumers. In most cases the retail prices were set at or very close to the maximum level indicated by the Regulation. Operators are ensuring information and transparency of tariffs for voice and data roaming. Roaming customers also have the possibility to opt for special tariffs including ones that comprise data. On the other hand, customers are often unaware of costs of data transfers when roaming, and inadvertent roaming is still an issue in border areas. The operators seemed ready to put in place a new system on the basis of the amended Roaming Regulation, which should reduce the risk of "bill shocks" by warning messages and blocking of data roaming when certain thresholds have been exceeded.

Fixed

Market situation

The year 2008 was characterised by only a slight decrease in the state-owned incumbent's robust market share in terms of call volumes in the fixed telephony market (79.5% by call minutes as of December 2008 compared to 80.3% as of December 2007). The market share by revenue is confidential. Concerning the distribution of voice traffic in terms of total call volume, fixed voice traffic continued to decrease, as it represented 62% of voice traffic, while mobile voice traffic accounted for 38% as of December 2008, compared to a ratio of 69% versus 31% the previous year.

The service of VoIP linked with a DSL subscription is not offered by any operator in Luxembourg, in contrast with the relative importance of this service in some other EU countries (EU average market share of VoIP operators by volume of traffic was 14.5% as of December 2008).

The incumbent offers free on-net calls as a part of its bundled offer. Alternative operators criticise this product, since they are not able to replicate it given that they have to pay interconnection fees to the incumbent. Having been notified, the ILR did not address this issue.

Regulatory issues

The reference interconnection offer (RIO) of 2007 is still in force for an indefinite period. RIO 2010 was subject to public consultations in 2009. Concerning the reference line rental offer (RLO), alternative operators consider the existing offer insufficient for the creation of a competitive environment, due to an insufficient retail margin (12.7%) that is, moreover, not set to change significantly in 2010, and due to the absence of a service level agreement.

Interconnection charges for terminating calls for local and single transit are still well above the EU average. While the EU average for local transit and single transit stood at 0.52 €-cents and 0.79 €-cents respectively as of October 2009, alternative operators are charged for these levels at 0.76 €-cents and 1 €-cent, being the same levels as the previous year.

In 2009 the Administrative Court took four decisions on appeals of the incumbent against the ILR's 2007 decisions. The decision regarding the reference interconnection offer (RIO) of 2007 was annulled on the grounds that the ILR was supposed to verify the incumbent's offer and impose a modification of rates and not to impose the rates directly. The ILR shortly afterwards adopted a new règlement whereby it dealt with this problem by approving the RIO 2007 again, with the requested formal correction, and moreover deciding that it remains in force for an indefinite period of time. The Court also annulled particular provisions of the ILR's decision regarding the fixed call termination market from 2007, because the ILR imposed different remedies upon the incumbent than upon the alternative operators and unjustly imposed upon the incumbent a burden of proof concerning cost orientation vis-à-vis all third persons, and not just vis-à-vis the ILR. The ILR appealed against the verdict and its decision remains in force. The same reason (burden of proof concerning cost orientation) led the Court to annul one provision of the ILR's decision from 2007 regarding fixed call origination market. The ILR decided not to appeal against this Court decision. Lastly, the ILR's decision regarding the conditions of interconnection was upheld by the Court.

Broadcasting

Market situation

The situation remained stable in comparison to previous years. Use of satellite TV increased by one more percentage point compared to the previous year, and had a penetration rate of 25% as of July 2009. So far only 3.0% of households had access to IPTV as of July 2009. Cable still remained the most used platform, used by 77% of households (no data on terrestrial broadcasting was available).

Regulatory issues

The incumbent succeeded in May 2009 with its appeals against two decisions of the President of the Conseil de la Concurrence (Competition Council) of January and February 2008, respectively. The first decision prohibited the incumbent to incorporate IPTV into any bundled offer until alternative operators were in a position to replicate this offer on the basis of a non-discriminatory and transparent network access offer from the incumbent, and the second decision imposed a penalty on the incumbent for non-compliance with the initial decision. The Administrative Court annulled the decisions on the ground that the Competition Council failed to timely communicate to the incumbent the harm that was allegedly caused by its anti-competitive conduct. The Competition Council appealed the decision of the Administrative Court. Both disputed decisions remain in force while the case is pending.

In the meantime, the incumbent markets IPTV outside the former package, but subscription to this product is in practice bound with an xDSL subscription under conditions which alternative operators are not able to replicate. According to the ILR, regulation of IPTV is not expected in the short term.

Horizontal regulation

Spectrum management

In 2009, the amendment to the GSM Directive allowed the use of the 900MHz frequency band also for systems other than GSM. Refarming of the 900MHz frequency band in Luxembourg is complicated by the country's geographical conditions and the necessity to follow actions of its neighbours. Mobile telephony licences have been granted until 2012. In practice, the 900MHz frequency band is used for mobile telephony services only in the countryside, whereas urban areas are covered by the 1800MHz frequency bands.

There has been no major debate so far on the digital dividend in Luxembourg. Operators declare to be interested more in the 900MHz frequency band than in the digital dividend.

Implementation of spectrum decisions

The implementation of the Commission spectrum harmonisation decisions has advanced further in 2009. The remaining Decision 2008/671 on the harmonised use of radio spectrum in the 5875-5905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS), and Decision 2008/673 on the use of the frequency band 169.4-169.8125 MHz (updating the ex ERMES paging system decision) are now declared by Luxembourg to be implemented in the Frequency Plan modified in March 2009. The same applies to Decision 2008/411/EC on the harmonisation of the 3400 - 3800 MHz frequency band for terrestrial systems capable of providing electronic communications services, and Decision 2008/477/EC on the harmonisation of the 2500-2690 MHz frequency band for terrestrial systems capable of providing electronic communications services. Luxembourg declared them to be implemented by the modification of the Frequency Plan of September 2009. The Commission services are looking into the matter in the light of further information received from Luxembourg on the Commission's request in January 2010.

Regarding Decision 2009/343/EC of 21 April 2009 amending Decision 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community, and Decision 2009/381/EC of 13 May 2009 amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices, their deadlines for implementation were 30 June 2009 and 1 November 2009 respectively, but Luxembourg has not yet provided information thereon.

Rights of way and facility sharing

Administration des ponts et chaussées, a public body in charge of civil engineering works financed by the State, publish its planned projects on its webpage, and so do the municipalities. Alternative operators continue to regret that the government has not delivered on its promise to put in place a centralised webpage that would inform on all civil engineering building permits. Alternative operators also claim that the information on the works is not useful for them unless it also includes an indication of costs for the operators, which is generally not the case. It is therefore mostly the incumbent that uses the public works as an

opportunity to deploy its network. Furthermore, the relevant Service of Media and Communications of the Ministry of State is aiming to put in place on the municipalities level a separation of authorities that decide and permit the deployment of local networks and that actually deploy and operate the networks.

In July 2009 the Administrative Court of Appeal dismissed a joint appeal of the incumbent and the State and confirmed the decision of the Administrative Court of November 2007, holding that placement of mobile network transmitters in the given case required to be subject to relatively complex *commodo et incommodo* permit procedure as their combined output exceeded the limit of 2 500 W. The impact of this decision on the installation of mobile signal transmitters elsewhere in Luxembourg remains to be seen.

THE CONSUMER INTEREST

Tariff transparency and quality of service

The consumer association is not aware of any major problems related to tariff transparency or to period of validity of prepaid mobile cards credits, given that this period was recently extended. Consumers predominantly complain about invoicing issues, and about certain operators' methods of recovery of debts.

Universal service

While no universal service provider has been designated, the incumbent provides universal service on a voluntary basis.

Number portability

Mobile number portability increased steadily in 2009. There were 89 874 ported mobile numbers as at the end of September 2009 which represents 19 800 new ported numbers since the end of September 2008. Since the start of portability in Luxembourg, approximately 12% of mobile numbers have been ported. Mobile numbers are usually ported within one day through an automated system developed in assistance with the consumer association, but the process can take four days according to the ILR. The service is free for the clients changing operators while the accepting operator pays €6 per number to the Economic Interest Group Telcom that is in charge of the system.

Fixed number portability is less frequent, with 11 283 fixed numbers ported as at the end of September 2009, which is an increase of 1 826 numbers in comparison with figures as at September 2008. There is no automatic system or central database in place. Alternative operators criticise the incumbent for requiring clients' invoicing numbers in order to identify the candidate for porting. The ILR is aiming to make the incumbent create a database that would allow the alternative operators to get the clients' numbers automatically without having to get back several times to the client.

Consumer complaints

The provisions of the Universal Service Directive concerning effective out-of-court resolution of disputes between consumers and operators are not yet effectively implemented in Luxembourg. The consumers who do not want to go directly to Court are currently recommended to address the Mediation Center of the Luxembourgish Bar, which is, however, too costly to be considered suitable for such kind of disputes. The concerned actors held

discussions in the end of 2009 about a new procedure inspired by the one that is in place in the insurance sector. The Commission is following this issue closely.

European emergency number 112

No major problems have been signaled, since 112 appears to be widely accessible from fixed (including public pay telephones) and mobile phones (using the national mobile network or by national and international roaming). VoIP operators providing Publicly Available Telephone Services (PATS) are required to ensure that their users can access 112 as well. 112 calls are handled by the *Administration des Services de Secours* (Rescue Services Agency) under the Ministry of Internal Affairs. There is an additional emergency number 113 for national police calls. The 112 PSAP (Public Safety Answering Point) in Luxembourg is able to handle calls in Luxembourgish, French, German and English.

Calling Line Identification (CLI) is available automatically for mobile phones with every 112 call (push mode), and upon request by the emergency services for fixed telephones (pull mode, available in less than one second). Localisation of a mobile caller refers to the last cell in which the phone was used. The national operators provide the PSAP with the maps of their coverage in order to enable the localisation. In addition, for mobile subscribers registered to directory services, the emergency services could obtain their address.

Harmonised numbers for harmonised services of social value (116)

In June 2009, the ILR stated that it had received a demand for attribution of the 116 111 (helpdesk line for children). In October 2009, the ILR assigned the number to Caritas – Jeunes et Familles a.s.b.l. that already operates a similar service known as Kanner- Jugendtelefon under telephone number 12345.

ePrivacy

In November 2009, the Commission delivered to Luxembourg a reasoned opinion regarding non-transposition of the Data Retention Directive (Directive 2006/24/EC), given that no national measures that would entirely implement the directive had been adopted so far.

However, the application of the law on data protection brings about an additional burden for the operators, who are not entitled to retain personal data regarding traffic for more than six months after the payment of the invoice for such traffic, whereas they are required to keep the data for at least 12 months for the purpose of research and criminal law enforcement. In the end of 2009 the Government was discussing a new legislative instrument that should address this issue, while simultaneously implementing the Data Retention Directive.

MALTA

INTRODUCTION

In 2009, Malta continued to witness an increase in fixed broadband penetration. The broadband market is characterised by two strong competitors (fixed line and cable incumbents), whilst alternative operators are disappearing from the market and have altogether only an insignificant market share. Dynamics in the mobile market increased after the entry of a third network operator in the market in February 2009. While signs of price competition were recorded on the market in 2008, during that year the mobile prices were the highest in the EU.

The key issue in Malta is to build ground for the deployment of next generation networks (NGN) as to promote legal certainty to operators for investments and to enhance broadband competition. Following the publication of a Green Paper on NGNs with the purpose of setting the policies for the network roll out, the Maltese authorities are currently considering Government measures which may facilitate the roll out of the networks. The Maltese national regulatory authority (Malta Communications Authority - the MCA) is acting as facilitator in the negotiations for a Local Loop Unbundling (LLU) agreement between the incumbent and an alternative operator. Whilst the LLU market has been regulated since 2003, LLU has not taken up. Alternative operators have criticised the MCA of not being determined enough to enforce regulated access. In the area of universal service, the MCA is revisiting the Universal Telecommunications Services Decision of 2003, and has published a draft decision on Universal Service Obligations on Electronic Communication Services in May 2009. Furthermore, the Maltese Government adopted a policy direction for digital terrestrial television (DTTV) setting out policy and strategy for digital broadcasting in order to meet general interest objectives.

REGULATORY ENVIRONMENT

Main regulatory developments

The Government proposed amendments to communications legislation to repeal the Radiocommunications Act and to include revised proposals on radiocommunications in a new Part under the Electronic Communications (Regulation) Act in order to have one comprehensive piece of primary legislation dealing with the various aspects relating to electronic communications. In addition, the proposals included also amendments to the MCA Act, providing for common procedures to be applied for all the sectors regulated by the MCA, covering *inter alia* matters such as rules on dispute resolution. The changes have been published in a Bill which provides for amendments to various communications laws, and are intended to enable the MCA to act more effectively in case of non-compliance. These changes are in the process of being discussed in the Parliament.

The MCA is acting as facilitator in the negotiations of one alternative operator with the incumbent to obtain a LLU agreement. The regulator is also working for improving the Reference Unbundling Offer (RUO) in order to make it clearer.

Following the market analysis in 2008, the wholesale broadband access market was deregulated in July 2009. The MCA continued the second round of market analyses by reviewing retail access and calls markets, fixed wholesale call origination as well as mobile termination markets. The fixed retail calls markets were found competitive and consequently

previously imposed remedies were withdrawn. The MCA also proposed to deregulate the retail access market. However, following the notification of this market under the Community consultation, the MCA decided to withdraw its proposal.

Organisation of the NRA

The MCA is the designated national regulatory authority (NRA) under the EU regulatory framework and is responsible for the regulatory functions in the whole electronic communications sector (telecommunications, radio communications and broadcasting transmission) including spectrum management. Its remit covers also e-commerce and the postal sector.

The MCA is headed by a Board comprising six members and the chairman. The Board approves the authority's strategic and business plans as well as its annual budget, and oversees the execution of these by the authority. The chairman is responsible for the overall direction of the MCA and its day-to-day running.

The chairman and the other members of the authority are appointed by the minister responsible for communications, which since March 2008 is the minister for Infrastructure, Transport and Communications. The members of the authority are appointed for a maximum period of three years but may be re-appointed on the expiration of their term of office.

According to the MCA – Annual Report and Financial Statements -, the average number of persons, excluding board members, employed by the authority during 2008 was 54. The number of employees increased to 69 as at the end of 2009.

Operators continue to be generally satisfied with the regulatory approach and openness to dialogue, however some voices call for more proactive approach from the regulator. A consumer association advocated an enhanced dialogue with the regulator.

Decision-making

The MCA has made progress in the second round of analyses which started in March 2008 and is planned to be finalised in 2010. In 2009, important deregulatory decisions were issued. In March, the MCA issued a decision withdrawing obligations from fixed retail calls markets. In July 2009, as a result of finding the wholesale broadband market competitive in 2008, the regulatory obligations were withdrawn.

In the area of dispute resolution only few cases were brought to the MCA. Only five disputes were registered out of which one was withdrawn, three were decided, while another is not being pursued anymore as parties are attempting to reach a settlement. Some operators referred that they are discouraged to raise disputes because of the lengthy dispute resolution process.

The Communications Appeals Board has the jurisdiction to hear and determine appeals from decisions of the MCA. The Appeals Board consists of a chairperson and two other board members appointed by the Prime Minister. In 2009, there was one change in one member of the Board. Criticisms were made by some stakeholders claiming that the Appeals Board is not effective due to lengthy proceedings. However, Maltese Authorities raised the point that when lodging disputes, undertakings do not always provide sufficient evidence for their arguments. In addition, according to the MCA the average time for dealing with appeals is currently six

months on average. When this report was drafted, there were eight appeal cases pending, in comparison to seven in September 2008.

Both competition and consumers issues are dealt within the Consumer and Competition Division (CCD) of the Ministry of Finance.

Operators expressed the view that they expect more expertise from the branch of CCD responsible for competition issues, the Office for Fair Trade (OFT). In addition, it takes long time to resolve cases. For instance, a case concerning wholesale broadband access market opened in 2005 is still pending. OFT works under the remit of the Minister of Finance, but there are plans to make it an independent authority. The Maltese Government had reached preliminary agreement that competition issues related to electronic communications should be dealt on the basis of concurrent jurisdiction between the MCA and the OFT. A public consultation on this procedure was launched, but no final decision has been taken.

As for consumer issues, it has also been reported that cases related to unfair commercial practices or misleading advertising take long to be determined, with the consequence that cases are dealt with considerable delays, for example, an unfair advertising campaign was run its full course as planned by the service provider.

MARKET AND REGULATORY DEVELOPMENTS

Total turnover for the electronic communications sector as of December 2008 was € 261 million (an increase of nearly 6% compared with 2007). In addition, operators invested € 41 million in 2008.

The Ministry for Infrastructure, Transport & Communications aims at providing Malta with a state-of-the-art broadband connection, in order to shorten distances to continental Europe. The alternative options for contributing to the deployment of NGNs range from public investment and public-private partnerships to exclusively private investments. However, the Government's role is yet to be determined. Some operators considered that this uncertainty is affecting the decision on investments in NGN in Malta.

The electronic communications market in 2009 continued to consist of three large players, capable of offering triple or quadruple play, and a limited number of smaller players, including an alternative fixed operator, one mobile virtual network operators (MVNOs) and a number of Internet Service Providers (ISPs).

In the fixed market, the incumbent still has a very large share of the fixed market (78.4% in terms of subscribers of direct access), but in a declining path as the cable operator managed to increase its market shares. The cable operator has also started its operations as a mobile network operator and is now offering quadruple play packages.

The competitive situation in the broadband market has deteriorated as the number of ISPs offering retail broadband services has decreased. In addition, wireless broadband services (BWA) have not gained momentum and their market share is still very low (around 3%). However, in spite of a decreasing number of competitors, fixed broadband penetration continued growing at a strong pace.

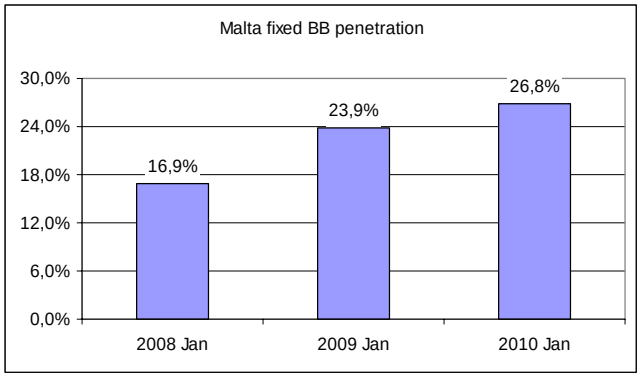
The main operators continued to provide new bundled offers as well as new stand-alone offers. Around 10% of the Maltese population currently subscribe to bundled offers. As reported already in the 14th Progress Report, it is clear that the bundling of various services on

a triple or quadruple-play basis offered by the large vertically and horizontally integrated operators could not be replicated by smaller players.

There are currently four submarine cables connecting the island to Italy, two of which are newly deployed. However, in one instance, a fault experienced by the cable operator resulted in a loss of international connectivity for a number of hours. The fault led to disruption of the cable operator phone and data services. This incident raised discussions concerning redundancy agreements, which as from January 2009 are mandated by law, in particular, on the price that undertakings need to pay to other operators in case of network failures for avoiding service disruption.

Broadband

Market situation



Since last year the number of ISPs offering retail broadband services has decreased further. The largest independent ISP has ceased operations and its subscribers were transferred to the incumbent, while the second largest ISP has informed the regulator that it will discontinue offering new services and taking on new subscribers. As a result, there has been a decrease in the number of subscribers connected with third-party retail providers over the past year, which is inducing the market towards a duopoly. The number of subscribers of third-party ISPs (using 'DSL lines on PSTN) went down from 8 351 in January 2009 to 3 352 in January 2010. Therefore the retail broadband market continued to become more concentrated during 2009. The cable operator remained the leader of the market with around 49% of retail broadband subscriptions whilst fixed incumbent has around 45% share. The market share of BWA service is quite low (3% in January 2010). Furthermore, stakeholders consider that by this technology it is difficult to compete with cable and DSL offers.

Despite these developments, broadband penetration continued to grow (by 2.9 percentage points from January 2009 to January 2010) to reach 26.8% in January 2010, above the EU average of 24.8%. The number of broadband lines in Malta increased from 98 109 lines in January 2009 to 110 769 in January 2010. In addition, Maltese consumers were also benefiting from further improvements in the price-speed ratio, with the vast majority (97.5 %) of subscribers enjoying speeds of 2 Mbps or higher. One operator launched a 50 Mbps download package at a cost of € 100 per month.

Given that the market is becoming more concentrated, there is a risk that the positive developments in broadband in terms of consumer choice may not be sustainable in the future.

The mobile broadband penetration as measured by dedicated data service cards increased from 1.2% in January 2009 to 1.9% in January 2010, which is below the EU average of 5.2%.

Regulatory issues

Following the deregulation of the wholesale broadband access market in July 2009, more attention has been focused on LLU. However, some alternative operators continue to point out that the RUO in place is not well adapted to the Maltese market.

The MCA has engaged in a new review of the RUO in order to make it clearer and to ensure that it is kept updated after it was first published a number of years ago. In the beginning of November 2009, the MCA published a consultation on a number of proposed changes. The review mainly covers the processes and the service level agreements (SLAs). A final decision is expected in the first quarter of 2010.

Given that the current RUO has not resulted in the LLU take up and the absence of ex-ante regulation in the wholesale broadband access market, one operator has recently requested the MCA to act as a facilitator in the negotiations with the incumbent to obtain a LLU agreement. The NRA has responded positively to the request and is currently initiating this facilitation process. This operator has also been trying to reach commercial agreements on bitstream access both with the incumbent fixed operator and the cable operators, but no agreement has been reached.

In addition, in 2010 MCA will be starting the second review of the wholesale broadband access market.

Mobile

Market situation

February 2009 marked the entry into the market of a subsidiary of the cable operator. It is the third full service mobile telephony operator in Malta using 3G technology. In few months, the new operator was able to get a market share around 5%, by means of a reduction in the market shares of the two established mobile operators in similar proportions. In an opposite trend, one of the first MVNOs to enter the market stopped its operations after just a few months.

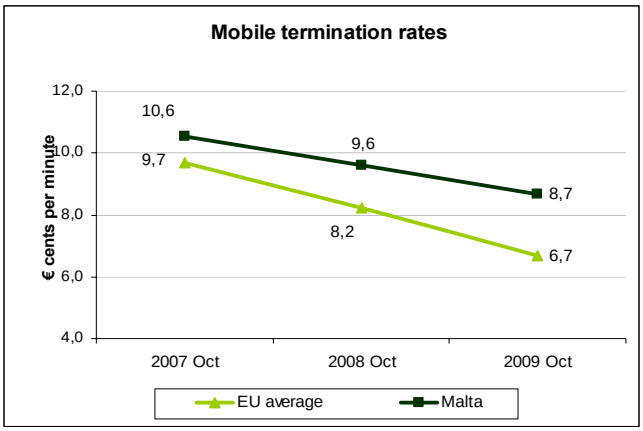
Mobile prices in Malta have been high in the EU comparison. The new market entrant is expected to enhance the competition in the market which is expected to drive price competition too. Already there are signs of strengthened price competition. In the course of 2009, mobile operators removed a top-up charge on pre-paid vouchers and associated time-windows.

Penetration continued to grow, reaching 101.0% in July 2009 compared to 94.5% in July 2008. There was also a slight shift towards post-paid contracts, marked by the drop in the number of pre-paid users to 82% as opposed to 87% the previous year.

According the MCA's statistics, mobile telephony registered considerable gains in traffic volumes. The number of outgoing mobile voice calls reached 121.6 million up to June 2009. On average, the number of outgoing calls in the first quarter 2009 reached 157.4 per active mobile subscription, representing a 4.7% increase compared to the previous quarter. National outgoing mobile voice call minutes in the first half of 2009 increased 21% compared to the same period of 2008.

Regulatory issues

In May 2009, the MCA notified its draft measure concerning mobile call termination markets designating all three mobile operators as having significant market power.



Regarding the price control remedy, the MCA proposed to continue to set symmetric mobile termination rates (MTRs) and introducing a glide-path linked to the change in the average MTRs adopted in the 27 EU Member States. However, it was also proposed that the change to the MTRs in Malta could not exceed an increase or a decrease of 10% per annum. Based on this price control mechanism, the previous rate of 9.62 €-cents has been reduced to 8.66 €-cents with effect from 15 June 2009 until 15 June 2010, which is still higher than the EU average.

In its comments, the Commission recalled the need to reduce termination rates to a cost-oriented level reflecting the cost of an efficient operator as soon as possible. The Commission also pointed out that inappropriate benchmarks will imply that the competitive distortions resulting from inconsistent and above-cost termination rates persist. In spite of the comments by the Commission, the MCA, however, adopted a final decision as originally proposed. In this decision, the MCA committed itself to amend the controls which will be effective for setting the mobile termination rates after the 15th June 2010, after consulting with all interested parties.

In view of this commitment, in November 2009, the MCA launched a consultation on the fixed and mobile Interconnection pricing strategy. The consultation document aims at establishing regulatory measures concerning termination rates during the period from 2010 till 2014. The MCA states its commitment to ensure that termination rates are implemented at a cost-efficient, symmetric level by 31 December 2012. However, the MCA believes that this can be achieved either through building a Long Run Incremental Cost (LRIC) model as proposed in the recommendation, or by benchmarking the local termination rates with the average of the termination rates set by NRAs implementing the recommended cost methodology.

Roaming Regulation

The operators comply with the amended Roaming Regulation and the subsequent reductions of roaming tariffs have benefited consumers. Operators are also ensuring information and transparency of roaming tariffs.

According to the MCA data, during the first half of 2009, the total number of call minutes generated by Maltese residents whilst roaming reached 2.2 million, corresponding to around 10% increase than that registered during the corresponding period in 2008. However, the MCA reported a fall of 1.2 million of minutes in calls made by foreigners visiting Malta, corresponding to a decline of 12.7% when compared to the same period in 2008. This resulted from a drop in tourist flows. According to the National Statistics Office (NSO), the number of

inbound tourists between January to June 2009 were estimated at 497 868, down by 13.8% over the corresponding period in 2008.[171]

Fixed

There are currently four nation-wide fixed networks, two of which are wireless infrastructures, and five service providers operating in Malta.

In terms of traffic volumes, fixed remained the most commonly used form of communication in Malta. Outgoing fixed voice minutes increased to 365.2 million in the first six months of 2009 corresponding to a 13.2% increase compared to the same period in 2008. The number of fixed line subscribers increased by 1.6% from the end of 2008 to a total of approximately 245 000 in the end of June 2009. This ongoing growth in subscriptions is partly attributed to a number of consumers purchasing fixed line access to the public telephone network from more than one operator instead of switching.

The incumbent still has a very large share of the fixed market, with 78.4% in terms of direct access subscribers, although its share continues to decrease (82.6% of market share in July 2008).

Regulatory issues

In March 2009, the MCA issued a decision deregulating fixed retail calls markets following its market analysis which found the market effectively competitive.

In September 2009, the MCA notified its market analyses of retail access and wholesale call origination markets. The MCA proposed to deregulate the retail access market, but decided to withdraw its proposal.

Regarding wholesale call origination markets the MCA proposed to continue imposing on the incumbent the same set of remedies as in its first round analysis adding also the obligations to provide wholesale line rental (WLR) and carrier selection/carrier pre-selection (CS/CPS), which were previously imposed at the retail access markets.

The MCA also revised fixed wholesale origination and termination rates.

Broadcasting

Market situation

According to the MCA around 87% of Maltese consumers are subscribing to pay TV service providers. Currently it is estimated that around 11.2% of all Maltese households are not subscribed to a pay TV service and still rely on free-to-air analogue broadcasts to watch television.

Consumers can receive pay TV broadcasts via a DTTV and a cable platform (allowing both analogue and digital reception).

The take-up of pay TV during the first half of 2009 continued to grow. At the end of the second quarter 2009, pay TV subscriptions reached 137 377, up by 10.2% over a 12-month

[171] One should note that both EU and non-EU data are included in the data provided by both the MCA (roaming traffic) and the NSO (inbound tourists).

period. In July 2009, DTTV subscriptions accounted for around 28.7% of total pay TV subscriptions, while analogue and digital cable subscriptions accounted for around 71.3%.

As at the end of second quarter 2009, digital pay TV subscriptions amounted to 94 431.

Regulatory issues

The digital switchover process began in 2005 through the adoption of a policy for DTTV and it is planned to be completed in January 2011.

The Maltese Government adopted a policy direction for digital DTTV. This document sets out policy and strategy for digital broadcasting in order to meet general interest objectives – GIO. The direction requires that a DTTV network is set up for the distribution of up to six TV channels which meet GIO, including the state television station Television Malta (TVM). The Public Broadcasting Services (PBS) will set up its own digital network and will carry the GIO stations.

Horizontal regulation

Spectrum management

Malta has three active licenses in the 900 and 1800 MHz band. The two GSM licenses will expire in 2010, while a 900 MHz band granted for paging services, which is mainly used for emergency communications by the health authorities, will expire in March 2011. The new assignment process was publicly launched last February via a consultation paper. The re-farming process (i.e. the making available of spectrum in the 900 and 1800 MHz band to technologies other than GSM, for example UMTS) is planned to be carried out as part of this new assignment. A comprehensive policy addressing the two bands is scheduled to be published by the first quarter of 2010.

In order to make use of the spectrum used to broadcast analogue TV (the digital dividend) for electronic communication services other than broadcasting, Maltese authorities stated that any additional availability of spectrum is subject to co-ordination with neighbouring countries (Italy, Libya and Tunisia). Concerning the UHF Bands IV and V (broadcasting bands ranging from 470 - 582 and from 582 - 862 MHz in Europe) the MCA also referred that at International Level (ITU), Malta was assigned a total of 8 UHF and 1 VHF channels for digital television. This allocation represents a smaller amount of spectrum than the analogue allocation which consists of 9 UHF and 2 VHF channels.

The MCA intends to put in place a process to support spectrum trading with the necessary safeguards against anti-competitive conduct and prevent speculative use.

Implementation of spectrum decisions

In Malta, radio spectrum decisions are implemented through a reference in the National Frequency Plan (NFP). Malta is in the process of implementing the decisions 2009/381/EC (amending Short Range Devices Decision) and 2009/343/EC (amending Ultra-Wideband Technology Decision). Furthermore, the Commission is currently assessing the implementation of the Decisions 2008/411/EC (on the harmonisation of the 3400 – 3800 MHz frequency band) and 2008/477/EC (on the harmonisation of the 2500 -2690 MHz frequency band).

Rights of way and facility sharing

Decisions on rights of way are appealed to the Communications Appeals Board. The standard fees are approximately € 280 000 per annum or 0.4% of gross turnover whichever is highest. Some operators continue to express concern over the alleged high rights of way costs and the cable operator has filed a Court case objecting these fees. However, Maltese Authorities do not share the view that rights of way costs are high.

Some operators also raised the concern over unnecessary constraints when seeking authorisation to dig up roads from Local Councils.

THE CONSUMER INTEREST

In order to assist consumers in making the right choices, the MCA in its website publishes guides to assist consumers in selecting a service provider and/or services in the electronic communications market, particularly mobile and fixed telephony, Internet and TV distribution services. This tool covers topics such as service contracts, complaints and the MCA role in assisting consumers facing difficulties with such services.

The MCA considers that the new regulatory framework will empower NRAs with more effective tools to address consumer issues and therefore the MCA expressed its willingness to transpose the new regulatory framework as soon as possible.

Tariff transparency and quality of service

According to a study conducted by the MCA in June 2009, a large majority of telephony consumers do not know how much it costs to make a fixed or mobile call. According to this survey, 79% of fixed customers do not know how much it costs to make an off-net fixed call (compared to 62% for on-net fixed calls). In addition, 75% of mobile pre-paid customers do not know how much it costs to make a minute call from a mobile phone (74% for post-paid customers).

However, 82% of mobile telephony services consumers consider having enough information regarding services and related pricing schemes offered by Mobile Operators.

According to one consumer association, further measures should be taken in order enhance tariff transparency for those who call to ported numbers as consumers do not know to what network they are calling to.

Currently, consumers may check whether a number is charged on-net prices by making an enquiry on the number '180', a service that all providers of telephone services implementing on-net and off-net tariffs are required to operate.

According to a consumer survey held by the MCA, 51% of those customers who were not satisfied with the broadband service (around 11.5% of the total number of broadband customers) said that their dissatisfaction was caused from the fact that the download speed was lower than advertised.

Universal service

The MCA is revisiting the Universal Telecommunications Services Decision of 2003, and has published a public consultation and a proposed decision on Universal Service Obligations on

Electronic Communication Services in May 2009. The proposed decision addresses the designation processes and reviews the funding mechanism for the financing of individual universal services. Following the publication of the decision (expected in 2010) the MCA will launch the designation process by giving to all parties the opportunity to present the MCA with an expression of interest for the provision of universal services and allow for an adequate adjudication process. In default of such expressions of interest the MCA is proposing to designate the fixed incumbent as responsible for providing each of the universal services.

The document also outlines the scope of the Universal Service, which includes *inter alia*, the provision of connection to the public fixed telephone network, public pay phones, directory services and directory enquiry services. Concerning directory services, currently in Malta there is one printed directory that only includes fixed-line telephone numbers, which given the lack of inclusion of mobile numbers is outside the remit of Universal Service, as it is defined in the EU regulatory framework. However, the designated universal service provider is required to make available a comprehensive on-line directory including both mobile and fixed numbers. The MCA is seeking the opinion of stakeholders on whether a printed directory is still necessary. According to the proposal the comprehensive on-line directory would remain unchanged. In practice most providers of voice telephony directory services (118x) also provide directory enquiry services that include both mobile and fixed numbers.

Number portability

In general, number portability is working well in Malta. The time to port mobile numbers is one of the shortest in the EU (1 day), while to port a fixed number takes a maximum of 5 days which is below the EU average of 6.5 days for porting a fixed number.

Some operators consider that wholesale prices for porting a number are too high. In October 2009, the price per fixed and mobile number ported was € 16.31 and € 9.32, respectively. In December 2009, the MCA launched a public consultation and a proposed decision on the number portability wholesale charges. In the document, MCA is proposing *inter alia* a charge of € 1.35 for each successful personal prepaid mobile porting and a charge of € 2.25 for each successful personal post paid mobile porting. In addition, it is proposed a charge of € 3.45 for a successful single personal fixed number porting.

Number portability is free of charge for both mobile and fixed telephony consumers.

The MCA established that each undertaking will have to set out the necessary solution that guarantees that at least 240 porting requests can be processed each day where justified by valid technical reasons. The MCA also published a "Number Portability Specification for Freephone Numbers" (800x range) which specifies those aspects of the freephone number portability ordering process.

Consumer complaints

According to the MCA, during the first six months of 2009, 169 complaints were reported to the regulator in relation to the electronic communications sector. Approximately 40% of all complaints reported to the MCA were related to the mobile sector, especially following the arrival of new players on the market. During this period, 11% of all complaints concerned fixed line telephony, 9.5% concerned the Internet, followed by TV, at 8.3%.

The nature of complaints ranges from billing, to migration (or portability) from one service provider to another and to quality of service.

European emergency number 112

Although 112 is presented as the main emergency number in Malta, only 42% of Maltese respondents to the Eurobarometer survey[172] thought of calling 112 in case of an emergency in their own country and a large percentage (39%) were not able to give details of any emergency number. Moreover, only 19% knew that 112 was the emergency number available across the EU.

In the preparation of this report, it was stated by the Maltese authorities that caller location was not yet available for 112 calls due to technical difficulties. The Commission services have asked the authorities to provide further clarifications on this issue and upon a reply will assess the matter.

Must Carry

As above mentioned, under a new policy direction for digital DTTV adopted by the Maltese Government, the Public Broadcasting Services (PBS) will set up its own digital network and will carry the GIO stations. Furthermore, the Broadcasting Authority is required to draw up detailed criteria to aid carry out the eligibility test for television channels which are to meet GIOs.

Network security

Malta is planning to set up the National Information Security Agency and operations are expected to start in the beginning of 2010. The Agency will be working in close collaboration with ENISA to ensure harmony in EU Information Security Policy.

The Agency will work as a driver of the national information security strategy and as a policy advisor to Government on matters related to network and information security.

The proposed functions for the agency are: (i) awareness raising in relation to network security; (ii) drafting information security rules and regulations; (iii) monitoring compliance and enforcing rules; (iv) leading investigations of alleged breaches.

172 "Eurobarometer Flash survey on the European emergency number 112 (February 2010)"

NETHERLANDS

INTRODUCTION

Widespread broadband access, with a large choice among providers, for affordable prices and at increasing speeds, often combined in interesting multiple-play packages: these are the benefits that consumers derive from strong competition in the Netherlands. Take-up of voice over broadband telephony and digital television continues at a fast pace and the mobile market is still very competitive. Several consumer protection measures have been implemented, in particular in the field of premium rate numbers and the use of broadband services.

These positive developments have not prevented the regulator from acting in favour of investments and competition, through the imposition of remedies on fibre networks. The mobile market would also need further remedies with regard to termination rates. While operators have started upgrading their network, some uncertainty has however arisen, in particular as a consequence of lasting court proceedings.

REGULATORY ENVIRONMENT

Main regulatory developments

After the adoption in December 2008 of new market decisions in almost all relevant markets, with a validity of three years, OPTA has been implementing the obligations imposed. This led to the consultation and approval of policy rules, tariff decisions and reference offers. The NRA had also decided to define and analyse the broadcasting transmission market, taking into account the specificities of the Dutch broadcasting networks, with extensive cable coverage and a sustained provision of analogue television signals. Decisions were adopted in March 2009 and concerned the four largest cable operators. Further implementation should lead, from early 2010, to enhanced competition, with consumers being able to switch operator and avail themselves of bundled services from different providers. For the wholesale market for voice call termination on mobile networks, OPTA has started preparing a new market decision, envisaging a combined market analysis for fixed and mobile termination.

As to the promotion of the citizens' interests, OPTA has been actively monitoring a series of new consumer protection rules, which entered into force in 2009 (transparency of tariffs, correct use of premium rate numbers, correct application of contractual arrangements, protection against telemarketing abuses, ban on spamming to businesses, etc.).

Organisation of the NRA

At the beginning of the year, OPTA published its priorities: stimulating competition in the business markets, encouraging investments in fibre networks, consumer protection in the field of tariffs, and Internet security, were identified as key objectives. Prevention of infringements was again earmarked as an important task. In that respect, the fixed incumbent, the first operator to have concluded a compliance charter with the NRA in 2008, is regularly reporting on its performances. The NRA is expected to publish its first annual report on the compliance achievements in early 2010.

As provided for by the OPTA Statute law, the board was reappointed for a four-year term on 1 August 2009. After an extensive external assessment of the past term of office, the evaluation report was presented to the Ministry in December 2009 and sent to the Parliament for further discussion. OPTA's activity as a whole was positively assessed. Recommendations were provided to the NRA regarding further improvement of consultation mechanisms, further reduction of administrative charges, active exploration of monitoring strategies and the benchmarking of management costs.

The NRA further strengthened its cooperation, for knowledge sharing and exchange of information, with other regulatory bodies having monitoring competences in the field of market regulation.

Decision-making

By the adoption of new decisions, at the end of 2008, in the wholesale markets for telephony (access and origination), the wholesale market for physical network infrastructure access (LLU) and wholesale broadband access, and in the wholesale leased lines markets, OPTA had initiated the second round of market analyses. It maintained regulatory measures for most wholesale markets or even extended them in some of these markets, for example introducing regulation for copper networks in the low-quality bitstream market and extending the wholesale line rental (WLR) obligation to business high-capacity telephone lines. Special emphasis was given to the renewal of obligations that were already in force during the previous regulatory period, such as WLR and WPC (wholesale price cap, as part of multiannual tariff regulation).

New regulation was introduced for fibre access in the wholesale markets for physical network infrastructure access (LLU) and for broadband access. Striking a correct balance between encouraging fibre investments and fostering competition via open access to these networks was indeed another concern of the NRA. This was also reflected in the business market where fibre access was imposed for the high-quality bitstream market. As to the access obligation of the optical distribution frame (ODF access) in the unbundling market, a distinction was made between tariffs for fibre-to-the-home and fibre-to-the-business networks. In accordance with its policy rules on the principles of tariff regulation (adopted in December 2008), the NRA imposed cost-oriented price caps on a multi-annual basis for the fibre connection and associated facilities (co-location and backhaul).

Following the second round of market analyses, OPTA was also able to withdraw regulation in the wholesale market of transit services in the fixed public telephone network and in the retail market of leased lines. While deregulation in the retail telephony markets started for the consumer market in January 2009, and was due to be completed for the business market in January 2010, the risk of price squeeze for alternative operators remains. In the framework of the wholesale non-discrimination obligation, the NRA imposed, in all market decisions, a certain number of conduct rules regarding selective price undercutting, fidelity rebates and tariff differentiation. The incumbent is not allowed to apply tariff differentiation, insofar as this would favour its own downstream undertakings. For this specific conduct rule, policy rules were specified as to the cost-calculation method that is used when assessing the price of downstream services in respect of margin squeeze: in cases where the offered services would not be replicable in its price-technicalities, thereby preventing operators from replicating these services, corrective measures have to be taken by the incumbent.

Alternative operators generally assess OPTA's activity as rather satisfactory but point to the specific approach needed for the business market since tariffs for access to Ethernet-based leased lines and broadband access would not allow reasonable competition. While the commercial phasing-out of interconnect leased lines seems to cast a shadow on the market, the NRA is expected to speed up the process of drafting reference offers and setting regulated tariffs. In that respect, the incumbent was ordered, in December 2009, to amend its reference offer for wholesale Ethernet access. OPTA's choice for cost-orientation models based on the costs of the incumbent operator is not seen, moreover, as a sufficient remedy.

In the meantime, all market decisions have been challenged before the court. While some uncertainty is spreading in the market as a consequence of unexpected delays in judicial rulings, a first decision was rendered by the Dutch Appeal Court in October 2009. It entailed partial annulment of the unbundling market decision and obliged the NRA to reconsider its conclusions.

MARKET AND REGULATORY DEVELOPMENTS

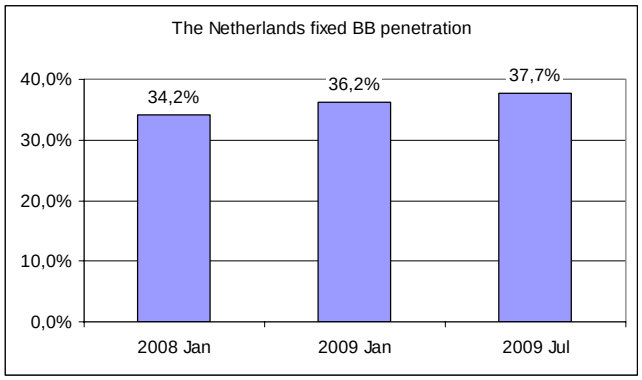
The total turnover of the telecommunications sector in the Netherlands grew in 2008 by 7.7% and amounted to €13.02 billion as of 31 December 2008. The revenues from fixed markets were €6.37 billion, and the revenues from mobile markets were €6.66 billion. Data on investments in the telecommunications sector is not available.

New developments in the choice of technologies and in the regulatory approach are taking place and affect the behaviour of the operators in the market. On the one hand, there is regulation in place that should stimulate investments through the rollout of NGN networks while allowing operators to compete. The joint venture for the rollout of fibre, in which the incumbent has been participating since December 2008 (approved by the competition authority, subject to certain conditions), concluded a new joint venture with the municipality of Amsterdam, and this under the same regulatory conditions. Fibre initiatives extend their reach, mainly at local or municipal level, but are not yet determining competition at a larger scale. On the other hand, the incumbent has been carrying out pilots of network rollout with fibre and/or VDSL technology and has drawn the first conclusions. These decisions should result in the short term in a speedy upgrading of its existing network using VDSL technology, while the rollout of fibre would be achieved step by step and on a regional basis, reaching by this way the double or more of households by the end of 2012.

Competition as to price and quality of broadband connections increasingly seems to take place between DSL networks and cable networks. The latter network operators, through the introduction of the EuroDocsis 3.0 technology and enjoying at the same time an excellent national coverage, are able to make interesting offerings (with speeds up to 50-100 Mbps for broadband connections). Dual-play and triple-play packages are being offered by an increasing number of operators, also by VDSL 2 technology, and enjoy a huge success (by respectively 16% and almost 12% of population, December 2008).

Broadband

Market situation



With 37.7%[173] penetration, the Netherlands is keeping its frontrunner position in the European broadband ranking, together with Denmark. Growth has been steady but is now slowing down. According to Eurostat, 90% of Dutch households have access to Internet, which is again a top position.

Market shares, which were rather stable in the last years – both the fixed incumbent and the alternative operators had 50% of the market – seem to shift: the alternative operators' market share of 52.4% in July 2009 compares positively to 48.8% a year before. DSL remains the dominant technology, besides the cable networks, which account for 36.2% of all retail broadband lines. Within DSL retail lines on the other hand, alternative DSL operators seem to enlarge their market share (26.3% in July 2009). Full unbundling remains the most important means of access. Fibre to the home remains limited (2.2%).

Regulatory issues

OPTA's decisions for the wholesale market for physical network infrastructure access (LLU) and broadband access market, which entered into force at the beginning of the year, were further implemented in 2009. As part of the price-control remedy, wholesale price caps, to be applied to the incumbent's regulated services, were consulted with the market and notified to the Commission. Draft decisions setting cost-oriented price caps for Sub Distribution Frame (SDF) backhaul, high-quality wholesale broadband access (WBA) and Wholesale Ethernet Access (WEA) should follow later.

Two decisions for unbundled ODF access to FTTH and non-FTTH networks were adopted in June 2009 as part of NGA access regulation. The first provides for a multi-annual price cap for FTTH networks, based on the Internal Rate of Return (IRR) methodology. The second identifies the Embedded Direct Costs (EDC) methodology as the proportionate tariff regulation system for non-FTTH networks.

On 28 October, the Appeal Court rendered a judgment on the appeal against the wholesale unbundled access decision. The judge ruled that the NRA had not provided sufficient economic data to substantiate the inclusion of ODF access to non-FTTH networks (fibre networks to business parks). As the potential specificity of the market with regard to these networks had not been sufficiently taken into account, the judge only nullified regulation as far as it concerns access to fibre networks to business parks. Regulation for FTTH as well as for copper networks was left intact by the judicial injunction, but OPTA was ordered to adopt a new decision within six months.

[173] Data as of July 2009.

Mobile

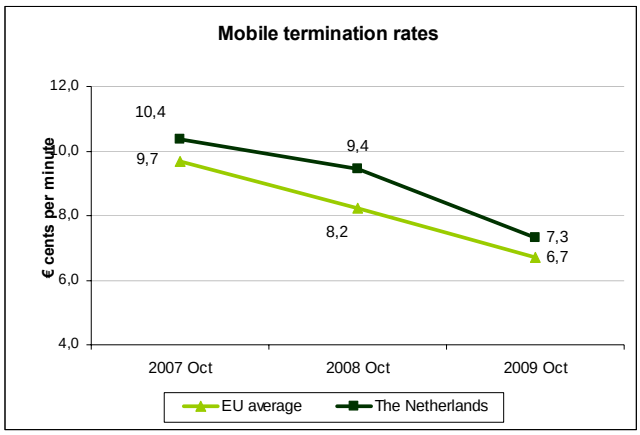
Market situation

With 21 million subscribers and more than 1 million new connections, mobile penetration increased further from 122.8% to 128.5%, this is above the European average of 121.9%. The growing proportion of post-paid connections of the last years is further confirmed (almost 54% of all mobile connections).

Three large network operators and a virtual operator are active in the Dutch mobile market, together with a large number of resellers. The second and the third operator each hold a market share between 20 and 30%, while the virtual operators have gained a considerable presence.

Regulatory issues

The decision on mobile termination rates, which was adopted in 2007, will expire in July 2010. Termination rates, subject to a price-control obligation and following a glide path, further decreased in May and July 2009. They are currently set between 7.00 €-cents and 8.10 €-cents, with an average of 7.32 €-cents, which is slightly above the European average.



Following the interim decision of the Court for Business Affairs of July 2008, not annulling the NRA decision on mobile termination, but reopening the investigation, the NRA had adopted a complementary decision substantiating again its original reasoning (December 2008). The latter decision is still pending before the Court.

Envisaging a combined market analysis for fixed and mobile termination, OPTA has started working, together with market players, on the development of bottom-up long run incremental cost (BULRIC) models.

Roaming Regulation

The Dutch operators are complying with the requirements of the Roaming Regulation. Some network operators are offering voice roaming at lower tariffs.

Fixed

Market situation

The telephony market in the Netherlands is characterised by a sharp uptake of bundles: more than 3.7 million double-play or triple-play subscriptions include at least a fixed voice telephony service.

While the number of traditional PSTN lines and the volume of fixed telephony traffic further decreased, the share of voice-over-broadband (VoB) connections rose to almost 40%. The wholesale line rental operators' share slightly rose to 5.4%. Within VoB telephony, the market share of DSL providers, including the incumbent, further increased.[174]

For direct access to fixed telephony services, the incumbent still remains the main provider (approximately 70% of all subscribers). It is mainly for international calls that the use of alternative providers has further increased (approximately 50% of subscribers).

Regulatory issues

Following the latest market decision of December 2008, retail markets are deregulated, as a first step for the consumer market since beginning 2009, and as a second step for the business markets as from 1 January 2010.

Implementation of the price-control obligation would be achieved by a Wholesale Price Cap (WPC), to be applied to the incumbent's regulated wholesale telephony services for the timeframe 2009-2011. The adjusted top-down cost model based on the embedded direct costs of the incumbent would lead to new increasing termination rates at the local and regional level. In its comments on the notified measure, the Commission invited the regulator to reconsider the cost allocation system and to align it with the approach outlined in the Commission's Recommendation on the Regulatory Treatment of termination rates.

Broadcasting

Market situation

While the number of broadcasting connections steadily grows, the market share of cable, the most used platform for broadcasting reception in the Netherlands, slightly decreased from 81% to approximately 80% (data Q1 2009 from Ministry market report). Digital TV penetration sharply increased with around 10 percent points in one year and amounts to 48% (2008). Digital cable shows the strongest growth and achieves a 52% share of digital television. Other platforms, namely terrestrial and DSL television, also extend their market share (almost 20% for DVB-T and between 5 and 10% for IP-TV).

Analogue cable transmission, in many cases combined with a digital subscription, remains very significant: More than 60% of digital cable end-users maintain their analogue subscription, while approximately 20% of the DVB-T end-users combine their subscription with the reception of the analogue cable signal.

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174 Source: OPTA.

A very large number of Dutch households are using triple or quadruple bundled packages, including (analogue or digital) broadcasting services.

Regulatory issues

New decisions for the wholesale market for broadcasting transmission services were adopted in March 2009. While these markets are no longer listed in the Recommendation on relevant markets, OPTA defined four cable broadcasting markets, corresponding to the service areas of the four largest cable operators, as relevant markets. The operators were found to have SMP within their coverage areas and were imposed the obligation to provide wholesale transmission at a cost-oriented tariff. The two largest of them were imposed the additional obligation to provide analogue signals, including access to the transmission platform for the purpose of resale ("WLR-C"; wholesale line rental for cable), at a retail minus tariff complemented by a price cap or, in case no retail equivalent is available, at a cost-oriented price.

In its comments letter, the Commission noted the specificities of the Dutch transmission market (sustained provision of analogue RTV) and insisted on a swift implementation of the resale obligation so as to quickly generate a market structure that is more prone to competitive dynamics. It further commented that once such a structure has been achieved, OPTA should promptly withdraw the proposed WLR-C obligation so as not to unnecessarily prolong the importance of transmission of analogue RTV signals and hamper the investment in, and the development of, digital services and infrastructures.

Two further decisions, setting out the implementation process and the regulated tariffs of the resale obligation, were consulted with the market and notified to the Commission in November 2009. The resale offers are expected to be made available to alternative providers in two steps: a rudimentary version of the wholesale service should be available shortly after the entry into force of the measure while a second fully-fledged version, built on the first, should be available a few months later. The Commission, in its comments letter, indicated that it was not convinced about the proportionality of the proposed timing for the implementation of in particular the first WLR-C release, and invited OPTA to provide the necessary technical and practical details in the final measure, in order to ensure an adequate and realistic implementation procedure.

Horizontal regulation

Spectrum management

An auction for mobile electronic communications services in the 2.6 GHz band is expected to take place in 2010 and would allow newcomers to enter the market. Following the Parliament's request to allocate a part of the spectrum to new entrants, the auction process has been delayed. The auction decision and rules were reviewed and published in October 2009. Spectrum will be assigned under the principle of neutrality as to technology used and services offered.

In October 2009, a consultation with operators was launched with regard to the GSM1800 licences. Reattribution of this spectrum band in 2013, when the licences expire, in combination with the GSM900 frequencies, would allow rearrangement of the whole GSM spectrum, offering equal chances to existing and new providers.

A policy proposal to reallocate the upper part of the UHF frequency band, as part of the digital dividend, to electronic communications networks, was put to public consultation in June 2009. A definitive decision will be subject to further research on expected interference problems and the possible solutions to this issue. As the Netherlands was the first EU country to switch over to digital terrestrial broadcasting in 2006, licences to broadcasters were granted with a duration until 2017.

By decision of the Telecoms Agency, two mobile network operators, which were found not to have made efficient use of the assigned spectrum, were imposed considerable provisional penalty payments. The mobile operators, which had acquired these frequencies through mergers, had been reminded of their obligation to comply separately with the conditions of every UMTS licence. In one case, the unused frequencies were given back to the authorities.

In December 2009, the Ministry decided to amend the national frequency plan, in order to allow the use of other technologies than GSM and UMTS in the 900 MHz, 1800 MHz and 2100 MHz bands. After publication of this measure, mobile operators would be able to apply for amendment of their licence.

Implementation of spectrum decisions

According to the Dutch authorities, the Netherlands have implemented the majority of spectrum harmonisation Decisions adopted by the Commission, except Decision 2008/411/EC on the 3.4-3.8 GHz band.

Rights of way

With the introduction in 2006 of amendments to the Dutch rules regarding rights of way, the requirements regarding structural separation between ownership and decision powers within municipalities were further specified. The provision of electronic communications networks and services by municipalities, or their participation in these undertakings, in principle forbidden, became subject to checks and conditions. These restraints would, however, be partially lifted by a bill containing legal measures for economic recovery. It would be further clarified that the municipality must promote open and non-discriminatory access to that network.

THE CONSUMER INTEREST

Tariff transparency and quality of service

OPTA has started enforcing the obligation of service providers to indicate maximum tariffs for certain categories of expensive premium rate calls (introduced in October 2008). Several checks were carried out and after warnings, most providers complied with the obligation. Two mobile operators were fined in December 2009 for breaching the more general obligation to provide transparent tariff information. OPTA also monitored the correct use of premium rate numbers and withdrew several numbers on the suspicion of abuse.

A new provision of the Telecommunications Act, containing sector-specific contractual arrangements, entered into force on 1 July 2009: contracts of indefinite duration, as well as contracts with a definite duration prolonged after automatic renewal, may always be terminated with one month's notice.

Consumers have the right to oppose further reception of commercial calls by registering in a "do not call me" register, which became operational from October 2009. Any company using telemarketing has to check whether the consumers concerned have registered with this service. In all telemarketing calls, a company has to actively offer the possibility to register for this service.

Users' access to the Internet and network management

Some net neutrality issues have been reported in the Netherlands in 2009. Traffic was "squeezed" from heavy Internet users on certain broadband networks while some mobile 3G network operators blocked the use of particular Internet services. Although these consumer problems seem to have been provisionally solved by the market, the national consumer association requested more transparency from network operators as to the actual download capacity of the broadband service.

Number portability

4.6 million fixed numbers were ported numbers on 30 September 2009, while 2.7 million mobile numbers were reported. The wholesale price for fixed porting is €2 and varies for mobile porting between €0 and €5. The time for porting mobile and fixed numbers has been further reduced to three days.

Consumer complaints

Since July 2009, premium rate number holders are obliged to be affiliated to the new dispute committee for premium rate services. This is especially relevant since number holders as well as telephony providers are obliged to inform users about maximum tariffs for expensive premium rate calls.

As a result of self-regulation by Internet service providers, switching between broadband services has become faster and easier for the user. The target that 95% of the migrations are performed within one day, was not met however.

Emergency services (112)

112 is also the national emergency number in the Netherlands. While Dutch people are thus familiar with this number, only 45% appear to be familiar with 112 as the number to call in case of emergency anywhere in the EU.[175]

According to the Court's October 2008 judgment, the Netherlands had not fulfilled its obligations under the Universal Service Directive with regard to caller location information. The Dutch authorities took measures to ensure, as from 30 March 2009, that the three mobile operators are providing caller location information for mobile calls to 112 to the national police exchange. This exchange is now able to process these calls and to forward them, together with the information on the location of the caller (by means of a "pull system") to the regional emergency services. This allowed the Commission to close the corresponding infringement proceeding in October 2009.

[175] Eurobarometer Flash survey on the European emergency number 112 (February 2010).

For one of the three mobile network operators however, it recently appeared that caller location information was not available for users of international roaming services. The Commission services are looking into this issue.

Harmonised numbers for harmonised services of social value (116)

Number 116000 has been assigned to and is made operational by the Centrum Internationale Kinderontvoering (International Centre Child Abductions). Number 116123 has been assigned to the Kindertelefoon while number 16111 has been assigned for future use.

Must-carry

New provisions of the December 2008 Media Act applicable to digital broadcasting further reduced the scope of the must-carry obligations. The Commission closed the ongoing infringement case in June 2009.

Data protection

The 2008 extension of the spamming prohibition to legal persons entered into force as from October 2009. OPTA's website for the lodging of complaints against spamming is now also available for businesses. In addition to the imposition of fines for traditional forms of spam, OPTA has also started fining natural persons who send spam through social network sites.

OPTA requests an active contribution from Internet service providers towards raising consumer awareness about the security risks posed by the Internet. In accordance with this obligation imposed by the Telecommunications Act, it issued policy rules about the information efforts to be delivered by providers (e.g. provision of information about spamming, botnets, phishing, spyware, accessibility and clarity of information). OPTA also urged providers to reach an agreement to detect botnets (networks of so-called zombie computers, often used for sending out spam) and to remove them from their networks.

The Telecommunications Data Retention Act of July 2009 finally entered into force in September 2009. Data must be kept for a period of 12 months in general. A reduced retention period of 6 months for Internet data is expected to be introduced by amendment to the law. The task of monitoring these obligations has been attributed to the Telecoms Agency of the Ministry.

POLAND

INTRODUCTION

Strong competition continued in the mobile market, while the incumbent remained dominant in fixed telephony. In the broadband market the incumbent's market share declined substantially as a result of increased competition. At the same time, broadband penetration, amongst the lowest in the EU, grew, though at a slower pace in 2009.

Throughout the year, the NRA was actively trying to find innovative approaches to solve persisting problems. The central regulatory development in 2009 was the agreement signed between the incumbent and the regulator aimed at guaranteeing non-discriminatory treatment of alternative operators in the provision of wholesale access services. Poland finalised the first round of market analyses in 2009. Following the closure of four infringement proceedings in 2009, two infringement proceedings were still pending.

REGULATORY ENVIRONMENT

Main regulatory developments

A large review of the Telecommunications Act of 2004, aimed at bringing the Act into line with the regulatory framework and transposing the Data Retention Directive, was published in June 2009, allowing the Commission to close three infringements proceedings concerning the independence of the NRA, consumer contracts and the obligation to negotiate interconnection, in the same month.

The Commission had also opened an infringement proceeding in 2006 since under Polish law consumers, such as pre-paid users who do not have a written contract, could be deprived of many rights under the regulatory framework. In January 2009, the European Court of Justice ruled that Poland had incorrectly transposed the definition of "subscriber" into national law. A further substantial draft amendment of the Telecommunications Act which, among others, amended the definition of "subscriber" was submitted for Government's approval in November.

In November 2009, the Council of Ministers approved a draft Act on the Development of Telecommunications Networks and Services, which is currently being discussed in parliament. The main aim behind the act is ensuring access to electronic communications and in particular broadband Internet in order to combat digital exclusion. The law also provides for a more open access to land and buildings for the purposes of investment and introduces an obligation to provide information on telecommunications infrastructure to local authorities and the Regulator. One of the main aims of the law is to enable local authorities to invest in infrastructure, and, exceptionally, where in a competitive market it would not be commercially viable, to provide services. It should also facilitate the use of ample EU funds for network investments.

One of this year's key regulatory developments was an agreement signed between the incumbent and the NRA, the President of UKE (Urząd Komunikacji Elektronicznej) in October. As regulatory obligations imposed under the first review of the markets were implemented with delay or to an insufficient degree, the NRA had initially considered

functional separation of the incumbent. However, following discussions with the incumbent on an alternative to functional separation which proposed voluntary restructuring and actions to allow alternative operators access on non-discriminatory terms, the President of UKE opted for an unprecedented regulatory agreement as a quicker and less costly solution. While concrete results of the agreement in terms of improved access conditions remain to be seen, the market welcomed the new spirit of co-operation which was previously lacking. In November 2009, a draft law which would allow the President of UKE to accept voluntary commitments proposed by operators was submitted to parliament.

Organisation of the NRA

The responsibility for regulation of the Polish market continues to be shared between the President of UKE who is charged with most of the responsibilities of the NRA under the regulatory framework and the Ministry of Infrastructure responsible for legal acts, including a number of ordinances.

The cooperation between the two bodies has improved considerably over the last year after a new Minister responsible for telecommunications was appointed in February, who had previously worked for the Regulator. The NRA, which is fully state funded, continued to experience some difficulties in attracting suitably qualified staff due to limited resources.

Under the amendment to the Telecommunications Act which entered into force in July 2009, the responsibility for market definition was transferred to the President of UKE, giving the NRA full control over the market analysis process. The amendment also reintroduced a fixed five-year term of office for the NRA President, together with a list of conditions for dismissal. This allowed the infringement proceeding regarding the independence of the NRA to be closed in June 2009. Previously the President of the Council of Ministers had unlimited discretion to dismiss the head of the NRA at any time, and without the need to indicate reasons.

The situation remained generally unchanged with regard to appeal proceedings. The Competition and Consumer Protection Court as well as the Provincial Administrative Court were responsible for the electronic communications cases, and an average appeal proceeding lasted two years. At the same time the very large number of appealed decisions (over 500 proceedings with the NRA) was reduced substantially as a result of the incumbent's commitment to withdraw pending cases, as part of the agreement signed with the NRA.

Decision-making

2009 witnessed much regulatory activity both by the President of UKE and the Ministry of Infrastructure. The Regulator finalised the first round of market analyses with the re-notification of the remaining part of the market for wholesale trunk segments of leased lines which was registered in September and allowed the Commission to close the pending infringement proceeding concerning lack of market reviews in October 2009. The second round of market analyses continued throughout 2009 as the NRA was planning to re-analyse all of the 18 markets of the previous Commission Recommendation on relevant markets.

While the NRA continued to concentrate on improving the competitive conditions in the market by facilitating new entrant access, more weight was given in 2009 to fighting digital exclusion and in particular increasing access to broadband Internet. The NRA held a bid for mobile broadband, where 20% of the capacity would be used for the provision of free mobile

Internet, it also published maps of 'white spaces' where broadband was not accessible, and continued to offer local wireless broadband spectrum for tender. This was complemented by legislative proposals aimed at facilitating investment in broadband infrastructure.

The President of UKE continued to have frequent recourse to dispute resolution as a regulatory tool, and wholesale rates continued to be set on the basis of methodology other than cost-orientation. This decision-making practice was formalised with the amendment of the Telecommunications Act which empowered the President of UKE to determine the level of wholesale rates by means of individual administrative decisions under the dispute settlement provisions. Moreover, the new provisions appeared to allow the NRA to deviate from imposed cost-orientation remedies and to set rates on the basis of other methodology. The recourse to dispute resolution as a regulatory tool where decisions can be issued at different points in time may lead to discrimination and a degree of regulatory uncertainty for operators not covered by the decisions. Moreover, such decisions would need to be notified according to the Article 7 mechanism. The Commission is looking into the matter.

MARKET AND REGULATORY DEVELOPMENTS

Revenues in the telecommunication sector in 2008 totalled €15.6 billion. The revenue in the fixed markets decreased by 13.5% while the revenue generated by the mobile market increased very slightly by 0.9%. The total value of tangible investments in the electronic communications sector stood at €2.5 billion in December 2008. Most investments were still made by mobile operators as the fixed incumbent reduced investments by some 36% over the reporting period. Operators pointed to regulatory policy and the economic downturn as reasons for the decrease.

While 2009 again saw no substantial investment in next generation networks (NGN), the President of UKE was working on defining a regulatory approach for next generation access (NGA). In December 2009, a consultation was launched on a model of measuring and estimating investment and maintenance costs for NGA to resolve a number of technical and economic problems with regard to the roll-out of NGN. The model, based on the LRIC methodology, meant to be a starting point for a discussion on the functioning of NGA in Poland. At the same time cable operators were investing strongly to upgrade to the DOCSIS 3 technology and mobile operators actively improved coverage and the capacity of their networks. With regard to investments in the fixed network, under the agreement with the Regulator, the incumbent committed to investing in 1.2 million broadband lines, (including 1 million lines allowing for speeds of at least 6 Mbps) at an estimated cost of PLN 3 billion (€ 0.7 billion). The NRA was also involved in initial talks on further joint investments in NGN by the incumbent and alternative operators (including mobile and cable) and on how to make use of the availability of EU funds.

Competition continued to be keen in the mobile market with the entry of further players and a consolidation of the market share of the fourth entrant. While the incumbent was still dominant in the fixed calls market, fixed to mobile voice substitution continued to be very pronounced. In broadband, the incumbent's market share decreased substantially and mobile broadband (also offered as part of bundles) was dynamic. As of July 2009, 3.3% of the population subscribed to bundled offers.

As regulatory obligations imposed under the first review of the markets were generally not implemented successfully by the incumbent, or did not bring about the desired effects, the

NRA had launched proceedings aimed at functional separation of the incumbent in November 2008. In parallel, the incumbent had submitted its proposal for an alternative to full separation ("Charter of Equivalence"), in which it proposed voluntary restructuring in order to provide alternative operators with access on non-discriminatory terms. The charter was later amended to take account of the results of a consultation and the NRA's suggestions. In the summer of 2009, discussions took place (initially between operator chambers and the NRA and later between the NRA and the incumbent) which led to the signing of a regulatory agreement between the incumbent and the President of UKE in October 2009.

The agreement, which was not formalised by an administrative decision, was seen by the NRA and market players as a sort of binding roadmap, setting out new rules for the functioning of the electronic communications market in Poland. Its overall aim was the improvement of cooperation with alternative operators. In particular, the incumbent undertook to fully implement existing regulatory obligations, and committed to take a series of actions (such as restructuring, introduction of information IT systems, key performance indicators and audits as well as separate motivational systems for employees of the wholesale units) to ensure non-discriminatory access. To limit disputes, bilateral agreements were also being signed with alternative operators (an agreement with the largest fixed alternative operator was signed in December) and the incumbent undertook to sign contracts on the basis of reference offers and to withdraw a large number of pending Court proceedings. In exchange for a commitment to invest in some 1.2 million broadband lines, the President of UKE agreed to keep regulated wholesale rates stable for the next three years.

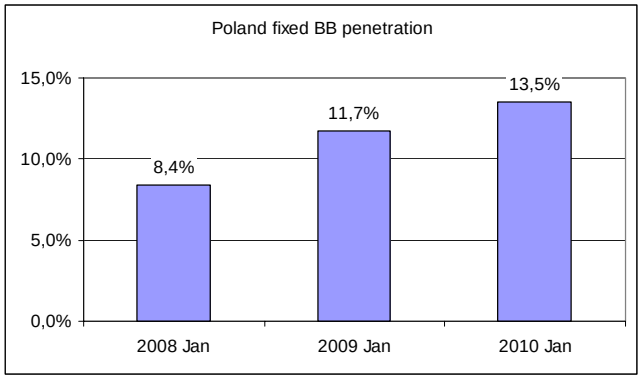
Alternative operators, which were originally concerned that a voluntary commitment would not give the same guarantees as functional separation, were positive about the agreement, while it was too early to speak of concrete results. Improved cooperation was seen as fundamental for a market previously dominated by disputes and Court proceedings.

The NRA is closely following the implementation of the commitments. At the same time the Commission continues its antitrust investigation against the incumbent for suspected infringement of the prohibition of abusive practices (Article 102 TFEU) in the form of possible refusal to give access to its network to provide bitstream and local loop unbundling.

While, the NRA expressed its intention to include the provisions of the agreement in future regulatory decisions, the Commission services are verifying whether the notification requirements for amendments to existing remedies and new obligations were being respected.

Broadband

Market situation



Broadband penetration in Poland grew at a slower pace in 2009. It reached 13.5% in January 2010, which was one of the lowest results in Europe and significantly below the EU average of 24.8%. Broadband speeds were amongst the slowest in the EU, with over 66% falling in the range of 144 Kbps and 2 Mbps compared to an EU average of 16.2% for

this segment. While in some areas higher speeds were not available due to technology limitations, speeds up to 2 Mbps continued to be popular due to price and consumer preferences. Lack of infrastructure continued to be a barrier to penetration growth.

Local loop unbundling (LLU) was still limited in Poland as 32 131 new entrants DSL lines were based on this type of access as of January 2010. The number of unbundled lines increased substantially in the second half of 2009 as the largest fixed alternative operator started migrating subscribers from bitstream to LLU with special offers for this purpose. Some further growth in uptake may be expected in relation to the agreement signed in October, which is aimed at facilitating alternative operators' access to the incumbent's wholesale services.

At the same time, the competitive situation improved significantly as reflected in a fall of the incumbent's market share in terms of broadband lines from 45.4% in January 2009 to 40.2% in January 2010. Cable operators, which were present in cities, were the main competitors to the incumbent’s broadband offering, and while DSL continued to be the dominant technology (at 55.7% of broadband lines), other technologies were closing in. The number of cable subscribers grew steadily reaching 1.4 million subscribers as of January 2010. Cable operators were also able to offer the highest speeds of up to 120 MBps at competitive prices. The incumbent's main fixed competitor had managed to reach 525 000 broadband subscribers by December 2009 (according to operator data).

Mobile broadband experienced further growth and the penetration rate reached 4.3% in January 2010, below the EU average of 5.2%. Mobile operators, including the fourth player, were also quickly expanding coverage and updating networks to HSPA+ allowing for transfer rates of up to 21 MBps. However, mainly due to data transfer limits, mobile broadband could not be considered as a full substitute to fixed services.

With regard to retail prices, consumers could benefit from further tariff decreases or higher transfer rates. Mobile broadband was also inexpensive and often offered in packages with fixed broadband. The incumbent carefully lowered its broadband prices in the autumn as each decrease leads to a discount in wholesale rates for alternative operators (based on a retail minus methodology of 51%).

The digital divide remained an issue, however, the situation improved slightly as the incumbent's mobile arm continued to provide Internet access using the CDMA technology, allowing for transfer rates of about 1 Mbps and allowing broadband access to households in digitally excluded areas. The coverage stood at approximately 70% of the population as of August 2009 and was expected to reach 90% at the end of 2009 according to operator data. The other two large mobile operators were also entering this market with services in WiMAX technology (with specific coverage obligations for 'white space' areas) as well as CDMA. The incumbent started offering satellite broadband in the whole territory allowing for speeds up to 2 Mbps. Some local authorities were also providing free Internet access at restricted speeds.

Regulatory issues

In order to fight digital exclusion, the NRA held a mobile wireless broadband access tender in the range 2570-2620 MHz, covering the whole national territory, with the requirement that 20% of the spectrum capacity would be reserved for the provision of free broadband access restricted to 256 Kbps (later 512 Kbps). In November, the winner (one of two bidders) was

awarded the frequencies, and according to licence conditions was expected to start providing commercial services after 18 months, including a free mobile broadband service.

In November 2009, the President of UKE notified the market for IP peering with the network of the incumbent and the national market for IP transit. It found a lack of competition in both markets, designated the incumbent as an SMP operator and planned to impose regulatory obligations, including price control.

In August 2009, the incumbent submitted the results of the regulatory accounts for the year 2008, as well as cost calculation results for retail and wholesale services for the year 2010, together with the auditor's opinion. The auditor issued comments with regard to the calculation of the cost of wholesale services which were not calculated in accordance with the President of UKE's new instructions. The incumbent had included in the calculation network maintenance costs for infrastructure over which wholesale services were provided, while these were to be excluded according to the NRA's instructions. The incumbent considers that UKE's method would lead to a situation where the costs of wholesale services, including LLU would have to be borne by its retail clients. The Commission did not have an opportunity to comment on UKE's method as the new methodology was not notified to the Commission.

Minor amendments to the LLU reference offer (related to general information, migration, and fines) were made in May 2009 at the request of the incumbent and alternative operators.

Mobile

Market situation

The mobile penetration rate reached 108.0% in October 2009, below the EU average of 121.9%. Operator's market shares did not change significantly, with the three large players having similar market shares - the leading operator held 32.6% of the market as of October 2009, while its strongest competitor held 31.2% and the combined market share of the other competitors stood at 36.2%. The fourth player, which entered the market in 2007, continued to set the pace with its new competitive offers and strong marketing (including direct comparisons in advertisements). It had 3.5 million subscribers at the end of 2009. Despite some recent growth, none of the 14 mobile virtual network operators (MVNOs) currently operating on the market reached more than 100 000 subscribers and the seven larger MVNOs had some 234 000 customers in total. Overall, the MVNO model was not very successful and one operator withdrew its operations in 2009.

As the Polish mobile market matured, the larger players concentrated on developing additional services such as mobile payments, financial services and the provision of content in an effort to hold on to existing clients. At the same time, players targeted niche clients such as older subscribers by offering special tariff packages and phones.

With regard to retail prices, a minute of mobile voice communication cost €0.11, below the EU average of €0.13. Subscribers enjoyed further price decreases in 2009 as the lower mobile termination rates (MTR) were reflected in retail tariffs. Mobile subscribers increasingly chose monthly subscriptions over pre-paid plans, as the share of post-paid subscribers increased by nine percentage points to reach 51% as of October 2009.

While some cuts to investment plans were announced as a consequence of revenues falling due to regulation (leading to decreased revenues from termination rates and international

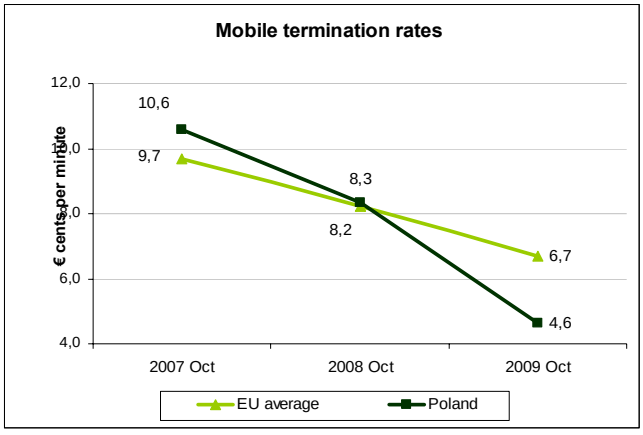
roaming) exchange rate fluctuation and to some extent the economic crisis, mobile operators continued to invest to upgrade their networks and improve coverage (HSPA+, CDMA and WiMAX). The winners of the tender for the 1800 MHz frequency band worked on an agreement to use their resources in common to roll out an LTE network which would allow transfer rates of up to 300 Mbps.

The winner of the beauty contest for frequencies in the range of 470-790 MHz was testing mobile TV services in the DVB-H standard in Warsaw. The frequencies will allow it to offer mobile TV services in 31 cities until 2011, and over the whole territory of Poland thereafter. The company which operates as a wholesale provider and has no possibility to offer its services to individual clients, was having difficulties to enter into contracts with mobile operators. The large players, whose consortium did not succeed in the bid, claimed not to be interested in the offer (only the latest entrant and some MVNOs were involved in the tests which started in October). They were already providing video streaming of channels and video material and this was not very popular. The competition authority started investigations in December to verify whether a collusive agreement, limiting competition, was in place.

The two operators that were awarded 1800 MHz spectrum in 2007 started offering mobile telephony services to meet roll-out requirements (coverage of 15% of the population by the end of 2009). The first one launched its services in May on the basis of three own base stations and national roaming. The second operator started offering services in Warsaw, in September, after UKE refused to further postpone the launch date.

There was some speculation in the market over the possibility of a fifth strong player in the market after the winner of last year's beauty contest for channels in the 900 MHz range, as well as the contest for mobile wireless broadband frequencies, was taken over by a new entrant linked to a large broadcaster. This company also had control of an operator disposing of 850 MHz frequencies and both were quickly rolling out an HSPA+ network over the whole territory of Poland. The company could benefit from the existing large subscriber base of the digital satellite operator and offer bundles of TV, broadband, mobile and VoIP. All these frequency resources put together would allow for similar possibilities as those enjoyed by the larger mobile operators.

Regulatory issues



In April 2009, the Polish Regulator notified the market for mobile termination with regard to the three large mobile network operators, leaving obligations unchanged from the first market review. In its comments, the Commission stressed that the methodology - charges based on costs incurred (with UKE being able to verify the level of charges using benchmarking or other methods), does not promote efficiency and invited UKE, when reviewing its market analysis, to follow the LRIC costing approach in line with the Commission Recommendation. Noting that UKE had previously set termination rates on the basis of individual decisions (including temporary ones), which were neither subject to the

Community nor national consultation procedures, the Commission underlined the obligation to notify such draft measures.

In line with the Commission's comment, three sets of notifications setting the level of MTRs have been registered since September 2009. The first one, registered in October, concerned the rates of the three large mobile network operators (MNOs) which were set at PLN 0.1677 (ca. 3.95 €-cents), below the EU average of 6.70 €-cents. The Commission noted that no glide path was in place beyond July 2009, and invited UKE to define the next steps of price decreases sufficiently in advance to ensure legal certainty and transparency for operators. The remaining notification related to a glide path for the fourth player, which was implemented through temporary six-month decisions and then prolonged by amendments to individual agreements. UKE proposed to set termination rates at the level of 9€-cents, as of 16 December 2009, (in a major asymmetry of 141% to the larger operator's rates) and to gradually lower the rates in order to reach symmetry, as of January 2014. The Commission invited UKE to move more swiftly to an efficient MTR level, since generally exemptions for new players may only be granted for a limited period of time. The Commission also called on UKE to avoid establishing MTRs by means of individual dispute settlement decisions, as this creates regulatory uncertainty for operators not covered by such decisions. While some operators were taking time to pass the benefits of MTR cuts to consumers, the incumbent decreased fixed to mobile retail prices as of November.

With regard to the smallest players in the mobile market, in November 2009, the President of UKE notified the market for mobile termination in the network of the fifth MNO and was planning to impose the obligation not to charge excessive prices on the operator and a glide path covering a period from 30 May 2011 – end of 2015. At the same time, in October and December 2009 (before an SMP decision), the NRA, in individual decisions not notified to the Commission, had imposed a glide path for this operator. In its comments, the Commission invited UKE to revise the level and duration of asymmetry and reminded it of the obligation to notify decisions setting MTR levels. The MTR rates of the latest entrant which launched services in September are not yet regulated. Moreover, UKE also launched public consultations on individual decisions setting MTR rates for a full MVNO linked to a large broadcaster which in March 2009 had been designated with SMP in the mobile termination market. The draft decisions have not been consulted at Community level. The Commission services are looking into these matters.

At the same time, the President of UKE was working on a bottom-up LRIC model for the calculation of mobile termination rates in light of the next review of relevant markets, but initially had difficulty collecting detailed data from operators.

New entrants were concerned about the high level of SMS and MMS termination rates at PLN 0.15 (3.53 €-cents) per SMS and PLN 0.90 (21.18 €-cents) per MMS of 100KB. In June 2009, the President of UKE organised a meeting on the issue, to urge operators to agree on rates which would better reflect the underlying costs, and eventually launched national consultations on the product market definition for SMS termination. Meanwhile, in November, the fourth entrant and one of the larger players managed to agree on a symmetrical decrease for terminating MMS messages (down to PLN 0.3, ca. 7.06 €-cents), after UKE refused to set the rates by an administrative decision.

Roaming Regulation

In general, all mobile operators complied with the provisions of the Roaming Regulation of July 2007 and the amendment to the Regulation, in force since July 2009.

Fixed

Market situation

Overall, the number of fixed subscriptions continued to fall steadily which was paralleled by a decrease in the volume of traffic and lower revenues from this market. The incumbent had 6.068 million fixed telephony subscribers at the end of the fourth quarter of 2009 comparing to 6.913 million a year earlier (according to operator data)[176]. In order to build interest in their fixed services many operators were offering packages of free calls.

The competitive situation in the fixed market remained generally unchanged as the incumbent's market share kept essentially stable at 66.6% (in terms of revenue in December 2008) which represents a decline of one percentage point in the reporting period. It was competing with one large alternative operator and an increasing number of smaller players. Alternative market players continued to base their services on wholesale line rental (WLR) agreements (1.2 million of WLR subscribers in the fourth quarter of 2009 as compared to 941 000 a year earlier) as well as LLU and own networks.

Regulatory issues

On 27 March 2009, the Commission registered a notification concerning the second round market review for the market for fixed termination on the incumbent's network. The President of UKE found lack of competition and proposed to modify the price control remedy by imposing the obligation to set charges based on costs incurred. Previously, the incumbent was obliged to calculate rates according to the LRIC model, and after the approval of an independent auditor, set charges allowing recovery of the justified costs. In its comments, the Commission reminded UKE that termination rates should be set at the cost which would be faced by an efficient operator, stressed that the methodology chosen by UKE would not appear to promote efficiency and invited UKE to review its analysis. The Commission also underlined the obligation of UKE to notify any future draft decisions setting fixed termination rates. The final decision adopted in September was not modified in line with the Commission's comments. Overall asymmetry in fixed termination rates remained very high in Poland in 2009 and the regulator's intention to gradually remove the differences to reach symmetry in 2014 (presented in December 2008) has not been formalised in a binding decision.

With regard to the market for trunk segments of leased lines, in April 2009, the regulator adopted final measures maintaining obligations on the part of the product market which lacked competition. In September 2009, an analysis of the remaining part of the market was notified where the NRA proposed to withdraw the incumbent's obligations in connections between 145 larger cities. As under Polish law, the President of UKE needed to issue a separate decision in order to remove existing obligations, the Commission invited UKE not to

[176] Company reports for the fourth quarter of 2009

unnecessarily delay the removal of regulation from effectively competitive markets. The reference offer for leased lines was approved in December. The NRA approved the level of fees presented by the incumbent.

National consultations on a single reference offer for access to the incumbent's network covering the scope of LLU, RIO, WLR and Bitstream access offers were launched in July 2009. UKE was considering streamlining the rules of cooperation between alternative operators and the incumbent in such a single reference offer in relation to the process of the incumbent's commitments to provide access to its network on a non-discriminatory basis.

Throughout 2009, the President of UKE was amending the interconnection and access agreements between operators in order to align them with the currently binding RIO of 2008 as well as the WLR reference offer. At the same time, the Consumer Protection and Competition Court upheld the incumbent's appeals against WLR decisions, as it considered that the retail minus methodology applied by the NRA was not foreseen under Polish law. However, as part of the agreement singed in October, the incumbent committed to withdraw appeals relating to WLR decisions, resulting in such decisions becoming binding.

Broadcasting

Market situation

2009 witnessed a further reduction in the number of households relying on analogue terrestrial broadcasting as their main means to receive TV broadcasts, as users switched to the three digital satellite platforms and cable networks which provided a more varied offer and better quality. At the same time, as of July 2009, a majority of households (57.5%) still relied on analogue terrestrial, while cable providers were the second platform (at 34.2% of households) and 26.5% of households relied on digital satellite providers. The fixed incumbent started offering satellite television (in cooperation with one of the large broadcasters) to those subscribers which were not covered by its IPTV service and managed to attract - according to its own figures - 133 000 subscribers in the first three quarters of 2009. The fixed incumbent was also planning to launch a satellite platform and the public broadcaster launched free satellite services in September.

In order to better compete with cable providers, which are capable of providing extensive bundled offers, the largest satellite operator was testing mobile broadband services and already operated a full MVNO. Other satellite operators were also considering offering converged services. The cable market remained very fragmented and only a minority of providers operated digital networks. It remains to be seen, if the process of digitalisation will bring some consolidation to this market. Cable was also only available in cities.

Despite growth, the IPTV market was still marginal since only 1.4% of households had chosen this platform. The fixed incumbent was the market leader with over 100 000 subscribers as of October 2009.

Regulatory issues

While many efforts remain necessary before analogue transmissions can be switched off as planned in July 2013, a draft plan for the introduction of digital terrestrial television (DTTV) was approved by the Committee of the Council of Ministers for Informatisation and Communication in December 2009. The draft plan sets out the steps in the process of transfer

from analogue to digital broadcasting, including a new law on the digitalisation of television broadcasting, which would create the much needed formal legal grounds for the switch-over. The Ministry had also issued an ordinance on the technical parameters of DTTV receivers specifying the standard as DVB-T, MPEG 4 in both standard and high definition. In September 2009, (following a July decision of the Broadcasting Council), the President of UKE issued a decision for the allocation of frequencies on the first multiplexer for all existing national analogue broadcasters. The decision specified the time to switch off analogue signals and allowed for the use of the frequencies until 2024 (with the exception of the public broadcaster which will eventually be transferred to a dedicated third multiplexer). While transmission tests were ongoing, the launch of the first multiplexer was delayed, as a commercial agreement still had not been signed with the operator of the broadcasting network. Some uncertainty also remained as to the second multiplexer despite a public consultation on the conditions for a tender for frequency allocation in July.

With regard to digital terrestrial radio, some tests were also ongoing and a public consultation was expected in early 2010. A digital radio multiplexer would give the possibility for some radio stations to broadcast nationally, since national analogue frequencies have been exhausted.

Horizontal regulation

Spectrum management

In the assignment of spectrum, the NRA has generally been supportive of new players in an effort to foster competition and bring about economic and social benefits. The President of UKE was also aiming at countering the digital divide by assigning spectrum for the provision of mobile broadband in the 2570-2620 MHz band, and fighting white spaces by arranging local spectrum tenders in the ranges 3600-3800 MHz band.

In light of the adoption of the GSM Directive, the President of UKE was also preparing for the re-farming of 900 MHz and 1800 MHz frequencies, and was working on establishing technology neutrality in those bands which should facilitate future migration for operators to newer technologies such as UMTS and LTE. Until now, the technology had been specified in the decisions, for the larger operators. Re-farming would serve to create an equal playing field for operators as at present one operator does not have any blocks of 25 channels, allowing for a carrier channel of 5 MHz, which is necessary for 3G services.

The draft Plan on the implementation of digital television estimates the total amount of frequencies to be released via the digital dividend at 392 MHz. According to the plan, the range 470-862 MHz will be allocated to five national television multiplexers, a national DVB-H network, as well as a single national network (in the range 790-862 MHz) possibly assigned for use by systems such as WiMAX 802.16m or LTE-Advanced. The future use of frequencies in the range 174-230 MHz has not yet been clearly defined. Operators are concerned about the lack of substantial public debate on the most efficient use of the dividend.

Implementation of spectrum decisions

According to the Ministry, Poland has implemented Commission Radio Spectrum Decisions 2007/90/EC, 2008/411/EC, 2008/477/EC. Further clarification requested by the Commission in relation to Decisions 2008/411/EC and 2008/477/EC was awaited at the end of 2009. The

implementation of Decision 2007/344/EC on the harmonised availability of spectrum information is still under way. As regards the transposition of the recently adopted GSM Directive, the Ordinance of the Council of Ministers of 29 June 2005 already provides that both ranges 880-890 MHz and 925-935 MHz are allocated for civil mobile use and will not need to be amended further. However, some changes by the President of UKE to the frequency allocation plan may be necessary.

Rights of way and facility sharing

The draft law on the development of telecommunications networks and services discussed in parliament intends to remove the major obstacles with regard to rights of way by opening access to land and buildings for the purposes of investment and is, thus, generally welcomed by operators. The draft law, which would amend a number of primary legal acts, is aimed at facilitating procedures and limits the time necessary to obtain permits. It also gives the NRA powers with regard to local area planning where disproportional and inadequate limitations have been established, and opens access to ducts of utility companies. Among others, the draft law regulates access to in-building wiring, and provides that all new multi-family buildings should be equipped with fibre.

THE CONSUMER INTEREST

Tariff transparency and quality of service

While consumers continued to face difficulties in comparing increasingly complex price plans and were concerned with the short time limits for the use of call credit, the President of UKE was in the process of certifying web-based tariff comparison tools. The NRA found that such certification would lead to better services for consumers, increase transparency and allow the existing websites to develop. Other certificates were also created for the categories of fair transfer rates or safe Internet.

The amendment to the Telecommunication Act introduced a number of changes in the interest of the consumer. For instance, the amount of penalty for breaking a contract ahead of time became related to the remaining length of the contract. Moreover, following the changes, operators became obliged to inform consumers in writing of all changes with regard to prices (previously only those not in favour of the consumer) and about their right to withdraw from the contract if they do not accept the proposed modifications. Since at times it may have been difficult to ascertain if a promotion was beneficial for subscribers, this approach assures transparency. However, operators pointed to the significant cost of informing all customers and were allegedly more reluctant to offer reductions.

Many operators joined the incumbent's initiative for education on the dangers of the Internet and, together with a number of non-governmental organisations, service providers and public bodies, signed an agreement for the safety of children on the web. A code of good conduct was also in place and its implementation was being monitored by the President of UKE.

Universal service

The fixed incumbent has, over the last three years, applied for compensation of the net cost of the provision of the universal service. The total requested for the years 2006-2008 amounted to PLN 567 million (approximately €133 million), to be shared by operators with revenues above PLN 4 million (€0.9 million). Following the Judgment by the Supreme Administrative

Court in August 2009, which ruled against the NRA's refusal to grant the 2006 compensation, the President of UKE was now obliged to verify the correctness of the cost calculations. However, this was delayed due to difficulties in selecting an auditor. At the same time, the NRA had finalised its internal analysis which included the estimation of intangible benefits resulting from providing the service. Operators were concerned about the need to make reserves for a possible compensation.

While an improvement in some quality indicators of the universal service was noted, the incumbent was not providing new connections on time and was paying fines, as this was more economical than building new lines.

The incumbent was offering a range of services dedicated to handicapped subscribers including dedicated discounts, special bills for the blind, equipment for those with hearing difficulties as well as free software allowing for the use of a computer by the blinking of an eye. Phone boxes equipped to be accessible by the handicapped were popular with this group of users, which led the President of UKE to reject the incumbent's application for a reduction of their number in the scope of the universal service.

Number portability

As a result of an amendment to the Telecommunications Act and a new ordinance of the Minister of Infrastructure, which entered into force in July 2009, the time to port a number was shortened to one day for mobile numbers and seven days for fixed numbers, which means a significant improvement compared to last year. The procedures were also simplified and the law removed direct charges to consumers for mobile portability. Operators were concerned about the short time to implement the changes and noted the lack of clarity on how to implement the new process. While mobile operators were generally applying the new rules, some problems were reported by fixed operators due to the large number of operators in the market and the lack of a central database.

As a result of the changes, and raised consumer awareness, operators noted an increase in the number of portings. As of October 2009, 421 973 mobile porting transactions were registered comparing to 228 055 the previous year. However, this still represents only a small share (1%) of the total mobile subscribers. The number of fixed porting transaction also increased from 274 047 in October 2008 to 378 848 in 2009.

Consumer complaints

Consumers continued to make good use of the NRA's services such as the call centre, an e-mail box and Internet communicators as well as the mediation service. In 2009 over 7 000 entries were registered in the NRA's complaint mail box and the consumer information call centre received 5 251 calls. A common source of complaints was the quality of the Internet service and in particular differences between the speeds advertised and those actually provided. As regards mobile broadband services, many end-users noted frequent connection cuts and limited coverage. Consumers also raised issues related to number portability, penalties for terminating a contract as well as disruptions in the provision of services.

European emergency number 112

As part of the planned implementation of a more advanced system of providing caller location information for calls to the European emergency number 112, in October 2009, the NRA has

signed a contract for the creation of a central database which, amongst others, would allow answering points to have quick access to location information. Polish consumers continued to be well informed about 112, as 56% of respondents knew that they could reach emergency services from anywhere in the EU by calling the European emergency number 112[177].

Harmonised numbers for services of social value (116)

As of November 2009, more than 4 500 calls were made to the 116 000 number for missing children which became operational on a 24 hours basis in March. The number 116 111, for child support, was launched in November and the number 116 123, for moral support to adults, which had been assigned in 2008, was expected to be launched in January 2010.

Must-carry

The Polish must-carry provisions in the Broadcasting Act date back to 1992 and apply only to cable operators. Digital satellite operators have pointed out that over time their platform has become one of the principal means for users to receive television broadcasts and would like to see technology neutrality apply to the must-carry regime. In accordance with the regulatory framework, national must-carry provision should be subject to periodical review.

Data protection

The transposition of the Data Retention Directive (2006/24/EC) was completed with the amendment of the Telecommunications Act and a supplementary regulation was issued in December. The retention period was set at 24 months and costs will be borne exclusively by market players.

With regard to Internet piracy, the Law on the Provision of e-Services provides that responsibility for making files available lies with the user and not the administrator of a service. The administrator, however, is obliged to remove files when it is officially informed that such files infringe copyright rules. While large sharing sites generally comply with this obligation, the police have intervened to stop sites which allow for illegal file sharing.

177 Eurobarometer Flash survey on the European emergency number 112 (February 2010)

PORTUGAL

INTRODUCTION

Several operators are investing in fibre and upgrading cable networks, and by the end of 2009 almost three million households could have access to high-speed broadband services. Usage of mobile broadband in Portugal is the second highest in the EU and just a slightly below fixed broadband penetration. The number of subscribers using an alternative operator for direct access in the fixed market continues to be the highest in the EU, and fixed subscribers are increasingly changing provider while keeping their numbers. The regulator amended the rules for number portability, establishing a maximum time of three working days for porting mobile numbers.

Important measures have been taken in Portugal during the last year as regards the legal framework for deployment of Next Generation Access (NGA) networks, including in-building infrastructure, access obligation to public utilities' infrastructure, reinforced rights of way and promotion of public and private investment. At the same time, the formal decision by the national regulatory authority, ICP-ANACOM, on the incumbent's concrete fibre obligations is still pending, although preliminary guidelines were issued in February 2009. Moreover, some key decisions on universal service, which have been pending for several years, are now under analysis by the new Government. Alternative operators are requesting more timely regulatory intervention and deterrent actions by the regulator, in particular as regards the installation of remote nodes in the incumbent's fixed network and the lack of an equal access to ducts compared to the incumbent's subsidiary.

REGULATORY ENVIRONMENT

Main regulatory developments

In January 2009, the regulator adopted final measures on markets for physical network infrastructure access and wholesale broadband access, introducing for the first time geographic market segmentation and deregulating some areas, which account approximately for 61% of all retail broadband accesses. Moreover, new national legislation was adopted during 2009 in order to promote NGA investments, regarding in-building infrastructure, access to public utilities' infrastructure, tax aid measures and public tenders in underserved areas. As a result, most operators have been investing on NGA networks during 2009.

The regulator has not concluded any other market reviews during the last year, although the process for some markets is advance. A review of the remaining relevant markets is increasingly urgent, as most markets were analysed more than five years ago and remedies might have become outdated due to evolving market developments. The regulator has started revising and adapting some reference offers, such as the one for LLU and the one for access to ducts. Some decisions by the Government are also needed as regards several topics related to universal service designation and the incumbent's concession contract, which seem to be currently under analysis.

Two infringement proceedings are currently pending in relation to the Universal Service Directive: one on the designation of universal service providers (C-154/09) and one on the availability of a comprehensive directory and directory enquiry service (C-458/07). On 12

March 2009, the Court of Justice of the European Communities ruled that Portugal failed to fulfil its obligations under the Universal Service Directive.

It should be noted that the Portuguese Government still holds a 'golden share' in the incumbent, and a separate infringement proceeding is pending in this regard (C-171/08). In December 2009, the Advocate General issued his opinion on the case stating that Portugal seems to have failed to fulfil its obligations by restricting the freedom of capital movement between member States.

Organisation of the NRA

According to ICP-ANACOM, the alleged increase of its regulatory costs compared to a previous forecast is due to the increased amounts reserved for pending legal actions and to the application of the new system for administrative charges and fees, which will be gradually applied during a transition period of two years. In December 2008, Portugal adopted legislation[178] approving a new system for the fees to be paid by postal and electronic communications operators, such as the administrative charges and rights of use for spectrum and numbering resources, which was complemented in July 2009 with the Regulation on the adoption, settlement and collection of fees[179]. In particular, spectrum fees are now paid based on the spectrum assigned instead of on the number of subscribers, in order to promote a more efficient use of spectrum.

Decision-making

In January 2009, the regulator adopted final measures on markets for physical network infrastructure access and wholesale broadband access, where the regulator considered the comments made by the Commission, though only some of them resulted in modifications of the previously proposed draft measures. In particular, the regulator has included the possibility of imposition of obligations on fibre in the market for wholesale broadband access, although no concrete measure has yet been notified in accordance with Article 7 of the Framework Directive while waiting for the final adoption of the Commission Recommendation on the regulated access to NGAs. The regulator launched a public consultation on the draft measures for markets for wholesale terminating segments of leased lines, wholesale trunk segments of leased lines and retail leased lines in December 2009 and for mobile call termination in January 2010.

Operators demand a quicker response by the regulator on issues such as the review of the Reference Unbundling Offer (RUO) and spectrum refarming, and criticise the lack of deterrent measures against the incumbent on issues such as breaches of number portability rules and margin-squeeze. After more than one-year investigation, in January 2010 ICP-ANACOM imposed a significant fine on the incumbent for having breached portability rules. In addition, the installation of remote nodes is considered critical by LLU operators for their business plans. Moreover, dispute resolution procedures are taking on average much longer than four months.

In October 2009, new legislation[180] entered into force establishing the system of fines and sanctions to be imposed by ICP-ANACOM for breaches of the legal and regulatory provisions

178 Portaria n° 1473-B/2008, de 17 de Dezembro and Regulamento n.° 300/2009, de 15 de Julho.
179 Regulamento n.°300/2009, de 15 de Julho
180 Lei n.° 99/2009, de 4 de Setembro.

in the electronic communications sector. ICP-ANACOM has mandated the publication of "Key Performance Indicators" for the different reference offers, which should enable a better follow-up of the implementation of remedies and, in particular, non-discrimination obligations as both internal and external provision indicators are included. This decision was appealed by the incumbent to the national courts but has not been suspended.

It seems that there were some improvements in the effectiveness of the appeals mechanism at the national courts, which is one of the lengthiest in the EU. First decisions on appeals, which were introduced in 2003, are still pending. Moreover, the level of litigation has increased in the past years[181].

MARKET AND REGULATORY DEVELOPMENTS

Portugal continues to have one of the highest ratios in the EU for total revenue as a percentage of gross domestic product (4.6% in 2008), which highlights the importance of the electronic communications sector in this country and the estimated market turnover amounted to €7.71 billion in 2008. Investment in the electronic communications market in Portugal totalled €940 million in 2008, a 21.2% decrease compared to the previous year and representing an investment to revenue ratio of 12.2%.

Competition has intensified in the Portuguese market following the spin-off of the former incumbent's cable subsidiary in November 2007 and the incumbent is now gaining a significant number of IPTV subscribers. There is a trend towards the use of bundled services: 7.0% of the population had subscribed to a bundled offer at the end of 2008, and the importance of audiovisual content offered by the operators is key. There is a quadruple play offer in the market and several operators are offering mobile broadband as part of bundled offers. The percentage of voice traffic originating on mobile networks (65%) compared to fixed networks (35%) continues to be relatively high in Portugal.

NGA deployment is considered a priority to overcome the economic crisis in Portugal. In January 2009, the Portuguese Government signed a protocol with four of the main operators in order to boost investment in NGA networks. Operators agreed to invest €1 billion in NGA networks and reach 1.5 million users in 2009 and the Government agreed to adopt legislative measures to remove barriers to investment in infrastructure and to promote public investment (€800 million).

Five public tenders were launched for deployment of NGA networks based on the technological neutrality principle in rural areas, which are not served by private operators, including the outermost regions of Açores and Madeira. The networks should provide a minimum download speed of 40 Mbps, cover at least 50% of the population in each area and include a wholesale access offer. These state aid measures have not yet been notified to the Commission. The main operators have not bided directly in these tenders, but some are present as for the provision of the retail offer. In addition, some of the main market players have requested loans from the European Investment Bank for co-financing fibre deployment in Portugal.

Despite the economic crisis, several operators are investing in fibre network deployments.

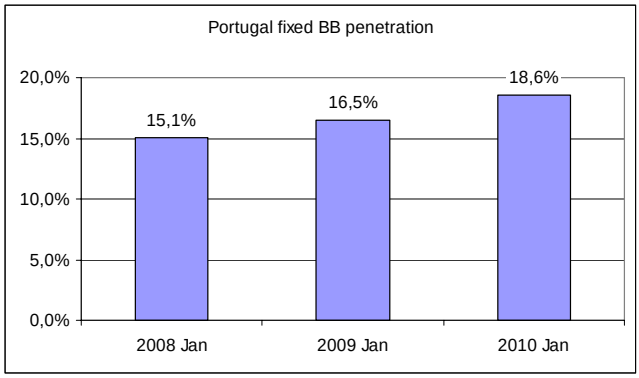
[181] Final decisions were taken on appeals introduced in 2001. However, most appeals are still pending: 2 from 2003, 1 from 2004, 6 from 2005, 4 from 2006, 7 from 2007, 12 from 2008 and 5 from 2009.

During the last year, Portugal adopted different pieces of legislation related to NGAs[182], which establish the regime for in-building and housing developments' electronic communications infrastructure and reinforce operators' rights of way. One of the key developments was the imposition of a cost-oriented, open and non-discriminatory access obligation to ducts, poles and other installations of public utilities (such as highways, railways, ports, airports, water, transport, gas and electricity), which are suitable for electronic communications networks. ICP-ANACOM will design and manage a centralised information system, which will provide information as regards the different infrastructures and publicize construction works. In this regard, a public consultation was launched in December 2009.

The national competition authority has been active in the electronic communications sector. In September 2009, it has imposed its largest fine ever on the incumbent (€45 million) and the former incumbent's cable arm (€8 million) for the abuse of dominant position in the broadband market in the years 2002-2003, before the current framework was transposed.

Broadband

Market situation



Usage of mobile broadband is increasing with an estimated datacard penetration of 16.1% as of January 2010, which is the second highest in the EU and just slightly below fixed broadband penetration (18.6%). Consumers are benefitting from new offers for prepaid mobile broadband services and these services are offering theoretical download speeds of up to 21.6 Mbps.

The Portuguese fixed broadband market grew last year at the same pace as the EU (two percentage points approximately) and penetration reached 18.6%, which is below the EU average (24.8%). The market share of the incumbent operator continued to increase from 40.6% in January 20009 to 43.8% in January 2010, whilst new entrants' market share increased in the last year for non-DSL lines (from 39.7% to 41.4%) and decreased significantly for DSL lines (32.8% to 27.1%).

The percentage of cable lines (38.5%) remain more or less stable, whilst DSL lines slightly decreased to 58.6% and FTTH accounts already for 1.6% of fixed broadband lines. Several offers of 100 Mbps, 200 Mbps and even 1 Gbps have been launched in the market, following FTTH deployments in limited areas by some alternative operators and also by the incumbent and the upgrade of the main cable operator's network to DOCSIS 3.0. The incumbent is now offering commercial services based on fibre, including a successful triple-play offer. At the end of 2008, the main cable operator merged with three alternative operators. According to ICP-ANACOM data, at the end of September 2009, there were 0.73 million households in Portugal cabled with optical fibre and 1.7 million households cabled with DOCSIS 3.0

182 In particular, Decreto-Lei 123/2009 de 21 de Maio, Lei n.° 32/2009, de 9 de Julho and Decreto-Lei 258/2009, de 25 de Setembro.

technology, mostly in the Lisbon and North regions of the country[183].

LLU continues to be the preferred wholesale option for alternative operators, although the number of fully unbundled lines (shared access is not used) for the provision of broadband services have decreased from 296 337 in January 2009 to 269 066 in January 2010. The number of bitstream accesses provided to alternative operators has continued to decrease from 49 620 in January 2009 to 44 787 in October 2009.

Regulatory issues

In January 2009, the regulator adopted final measures for the markets for physical network infrastructure access and wholesale broadband access, where it has proposed the introduction of geographic segmentation in the market for wholesale broadband access. The reference offer for access to ducts and associated infrastructure (known as ORAC), which was originally an obligation on the incumbent as holder of a concession contract, has now become an obligation following the finding of significant market power in the market for physical network infrastructure access. The obligation of providing access to dark fibre is considered as a last resort remedy and has not yet been detailed. This market analysis has been appealed at the national courts and is still pending.

The regulator has indicated that a decision on fibre remedies (one of the areas where the Commission made comments) would only come after the adoption of the Commission Recommendation on the regulated access to NGAs. However, the incumbent as well as some alternative operators have already launched commercial offers over fibre.

In February 2009, ICP-ANACOM published a report on the public consultation on NGA networks providing some preliminary guidelines. In this report, the regulator highlighted the importance of access to the incumbents' ducts for promoting investment by alternative operators and, in this regard, in November 2009 the regulator notified to the Commission some amendments to the ORAC.

As a result of the geographic segmentation on the wholesale broadband access market as adopted in January 2009, the market is divided into competitive and non-competitive areas[184]. Alternative operators fear the risk of the incumbent cross-subsidising its retail offers between the different areas and that, in case the incumbent does not offer a bitstream service in the competitive areas as from January 2010, it might make it difficult for alternative operators to provide services to the business segment.

In August 2009, the regulator notified the Commission draft measures regarding technical aspects of the RUO, known as ORALL, which include a wide range of issues previously raised by operators (quality of service, compensation, the synchronisation of local loop unbundling and number portability, etc.). No change to the LLU prices was proposed. LLU prices are now just above the EU average: the monthly average total cost was €10.05 for full unbundling and €3.57 for shared access in October 2009.

Mainly only two undertakings continue to provide LLU services, and they claim that the incumbent is deploying remote nodes in its fixed network, thus reducing the number of lines

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183 ICP-ANACOM

184 Areas with at least an LLU and a cable operator present and where the cable coverage is above 60% of households have been defined as competitive by ICP-ANACOM (184 local exchanges).

subject to unbundling from local exchanges and putting in danger its businesses plans when they have been significantly investing in LLU during the last three years. The LLU operators are concerned about the lack of transparency of this process and have requested regulatory intervention, as they believe competition on LLU is important in the medium-term and still has growth potential as it is the cheapest means to provide broadband services to most residential users. It is important for the regulator to ensure a smooth transition from the current regulatory obligations towards the ones needed for fibre networks.

According to the regulator, only 4% of the incumbent's copper network is currently affected by the installation of remote nodes. The amendments of the ORALL proposed by the regulator in August 2009 include certain measures to monitor and make more transparent the process. The only alternative solution at the moment is access to the sub-loop, but some operators are requesting access to dark fibre for the affected loops.

Mobile

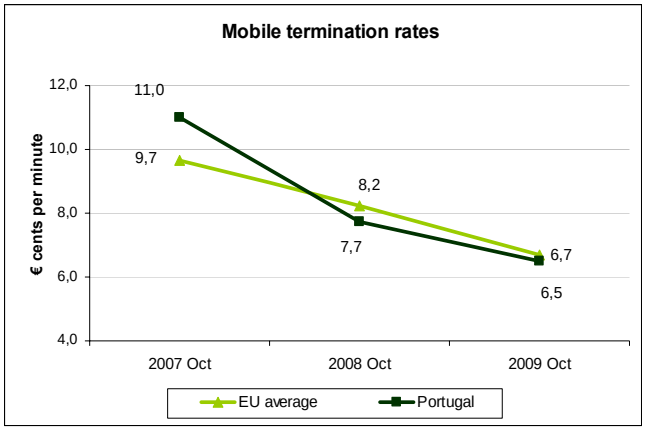
Market situation

During the last year, mobile penetration has continued to grow in Portugal (9 percentage points) amounting to 146.2%, which is well above the EU average (121.9%) and shows the intensive use of mobile services by Portuguese subscribers. The average price per minute for mobile voice services in Portugal is just below the EU average at €0.12, and the annual average revenue per user (€257) is below the EU average (€323).

The proportion of prepaid customers (73%) continues to be one of the highest in the EU. The Portuguese mobile market is also characterised by low churn, and the figure for ported mobile numbers is still low at 395 732 as of October 2009. Two mobile virtual network operators (MVNOs) and a few mobile service providers are currently offering a full range of mobile services in Portugal, although their market share is very low.

Regulatory issues

In July 2008, the regulator adopted final measures in the mobile call termination market including a glide path with prices that come back to symmetry as of October 2009. Following the latest price reductions, mobile termination rates (MTRs) in Portugal (6.50 €-cents) are now just below the EU average (6.70 €-cents).



The regulator is currently working on a new analysis of the mobile call termination market and, contrary to the last notification of 2007, the regulator plans this time to notify a complete market analysis including a glide-path still based on benchmarking. In January 2010, the national consultation on the draft decision was launched, which proposes a gradual reduction of MTRs from their current level to 3.50 €-cents as from April 2011.

Moreover, the regulator plans to develop a bottom-up LRIC model for cost accounting following the Commission Recommendation on termination rates, which would be taken into

account to set the MTRs as from 2011 onwards. Interconnection payments due to traffic unbalances are expected to be reduced in the future due to the overall decrease of the MTRs.

Roaming Regulation

Mobile network operators and MVNOs in Portugal are offering voice and SMS retail prices at the price caps established in the Roaming Regulation, whist wholesale prices are significantly under the roaming cap. However, retail data roaming tariffs in Portugal are amongst the highest in the EU[185]. A mobile operator has a permanent special roaming offer, whilst some other operators are launching some temporary offers during the summer period.

Fixed

Market situation

The incumbent continues to have a large share of the fixed voice market, both in terms of revenues (68.3%) and traffic (64.5%). The use of fixed number portability is relatively high and there were 327 457 portability tranactions between January and September 2009.

As of July 2008, 41.3% of subscribers were using a provider other than the incumbent operator for direct access, which is the highest figure in the EU and continues to increase. This figure shows that the use of alternative operators for the provision of fixed voice services has significantly increased in recent years, due to the increased take-up of bundled offers from cable and LLU operators, and the provision of fixed telephone services using mobile frequencies.

The decrease of the use of carrier selection (-74.7%) and carrier pre-selection (-22.4%) has intensified during the last year[186]. VoIP originated calls represented only 5.4% of the traffic in the Portuguese fixed sector, and the number of nomadic VoIP customers has for the first time decreased.

Regulatory issues

In March 2009, ICP-ANACOM modified the Reference Interconnection Offer where it has established the activation of the pre-selection service at €3.18 and maintained the fixed origination and termination tariffs. The interconnection charges for terminating calls in the incumbent's network are now for local level and double transit above EU average.

Since the beginning of 2007, the incumbent is offering capacity-based interconnection in addition to the metered interconnection model, and so far only one alternative operator is using it. The regulator is currently revising the prices of capacity-based interconnection.

The regulator has launched a call for tender in order to develop a bottom-up LRIC model for setting both fixed and mobile termination rates, in accordance with the Commission Recommendation on termination rates. The incumbent operator is obliged to pass on the reductions on fixed termination tariffs by alternative operators to its retail offers.

In June 2008, following the spin-off of the incumbent's cable subsidiary, ICP-ANACOM stated that the company was exempted from the obligations previously imposed on the

185 ERG Benchmark Data Report for October 2008 – March 2009

186 ICP-ANACOM

incumbent's group but it was subject to the same regulatory obligations imposed on alternative operators as regards the market for fixed call termination. The Commission is expecting shortly the notification of the market for fixed call termination, as the regulator is currently working on its review, as well as on the review of the fixed call origination and the fixed retail access markets.

According to the regulator, the use of wholesale line rental offer (known as ORLA), which enables alternative operators to provide access together with telephone services, has significantly decreased in the last year (62 000 lines by October 2009) partly due to the decrease of subscribers using carrier pre-selection services.

The regulator launched a public consultation on the draft measures for markets for wholesale terminating segments of leased lines, wholesale trunk segments of leased lines and retail leased lines in December 2009 and it will revise accordingly the leased lines offer (known as ORCA).

Broadcasting

Market situation

The main platforms for the provision of broadcasting services are cable (37.3%) and analogue terrestrial TV (35.7%), followed by satellite (15.4%) and IPTV (8.3%), which has experienced a significant growth. In addition to two analogue terrestrial networks, Portugal has very high cable network coverage, covering almost three out of four households, with some regional cable operators and one main nationwide cable operator.

In February 2008, two public tenders were launched for the assignment of frequencies for digital terrestrial television (DTT) both for free-to-air (including certain must-carry obligations) and for pay TV channels. The incumbent was assigned the rights of use for the free-to-air channels in December 2008, and started broadcasting them in April 2009. Following an appeal by the alternative applicant, the decision to award the frequencies for the pay TV channels to the incumbent was confirmed by the national courts and the relevant rights of use were assigned in June 2009. However, the incumbent has recently requested to return those frequencies.

The Portuguese Government set out that the analogue signal should be switched off by 26 April 2012[187]. The incumbent is requesting more legal certainty as regards the pay TV channels, as spectrum was assigned in the 790-862 MHz band subject to future harmonisation decisions.

Regulatory issues

There have not been changes as regards regulation on the market for broadcasting transmission services. In 2007, ICP-ANACOM considered only the analogue terrestrial television broadcasting to be a wholesale market susceptible to *ex ante* regulation, and it maintained the obligations under the concession granted to the incumbent and imposed further obligations to ensure transparency and accounting separation.

[187] Resolução do Conselho de Ministros n.° 26/2009, de 17 de Março

The national competition authority is currently analysing the acquisition of the undertaking managing the analogue broadcasting terrestrial transmission network by the fixed arm of the incumbent.

Horizontal regulation

Spectrum management

The Portuguese regulator continues to be very active regarding spectrum issues. Following the launch of a public consultation on the Broadband Wireless Access auction, in October 2009 ICP-ANACOM launched an auction for 36 frequency rights of use in the 3.4-3.8 GHz band following a two-phase auction, with the second phase open to all operators in order to foster new entrants. It is the first time the regulator is applying this system for spectrum assignment, where flexibility is enshrined due to the segmented approach in nine geographic areas and the technically and service neutral principle. This band can be used for fixed, nomadic and mobile services and a decision on the auction outcome is expected by mid-2010.

The assignment of frequencies in the 2.6 GHz band (considered as one of the frequency bands that can be used for LTE services) is expected before the end of 2010 also in accordance with technological and service neutrality principles. Moreover, decisions on refarming and digital dividend are also expected to be taken shortly. It seems that refarming is not a very contentious issue in Portugal, as spectrum is equally distributed amongst the mobile network operators and, according to the regulator, it seems there is no interest by other operators. The regulator will need to amend the individual rights of use in the 900 MHz and 1800 MHz bands and has recently proposed to modify the national allocation frequency plan (known as QNAF) in order to allow the use of the spectrum for technologies other that GSM.

During the public consultation on the digital dividend carried out in the first half of 2009, the issues about the allocation for broadband services in the 790-862 MHz band, which has recently been assigned for DTT services, the quantity of spectrum allocated for DTT as well as the co-ordination issues with neighbouring countries raised most interest by stakeholders. A tender for broadcasting mobile TV frequencies was also urgently requested by the sector. The tender for 450-470 MHz frequency band for mobile services was finally declared void, following the failure of the only applicant to provide a guarantee.

Implementation of spectrum decisions

In December 2009, the regulator launched a public consultation on the QNAF, which should incorporate some of the last Commission Decisions[188]. The Commission services have requested Portugal further information as to the implementation of several Commission Decisions[189] adopted under the Radio Spectrum Decision[190]. The Commission services are currently analysing the information recently provided by Portugal.

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188 Commission Decisions 2006/771/EC (as amended by Commission Decision 2009/381/EC) and 2009/343/EC.

189 Commission Decisions 2005/513/EC (as amended by Commission Decision 2007/90/EC), 2008/411/EC and 2008/477/EC.

190 Decision 676/2002/EC

Rights of way and facility sharing

Under national law, the incumbent, as holder of a concession and now as well as operator with significant market power, is obliged to provide a reference offer for access to ducts and associated infrastructure (known as ORAC) at cost-oriented prices. The offer is used by most operators and, in particular, there have been a significant number of requests since 2007.

In November 2009, ICP-ANACOM launched a public consultation on amendments of the 2006 reference offer and it seems to be considering the possibility of extending its scope to poles, which are important for deploying networks in remote areas. Alternative operators are pointing to penalties, access to poles, simplification of the administrative procedures and, in particular, service level agreements, as the main areas where improvements are essential.

In order to foster NGA deployment, new legislation[191] was adopted which imposes and access obligation to all public infrastructure-based utilities and ICP-ANACOM is now working on implementing the centralised information system. In the past, some operators accessed the infrastructure of certain transport and energy undertakings based on voluntary and non-discriminatory agreements. This legislation also reinforces operators' rights of way, mainly establishing a harmonised procedure for local authorities and coordinating underground intervention.

Administrative charges

In addition to an appeal to the national courts, some operators launched a complaint with the Commission in relation to the legislation[192] that approves the fees to be paid by postal and electronic communications operators regarding an alleged state aid, which could also constitute a breach of the Authorisation Directive provisions on administrative charges. In particular, the legislation establishes that some revenues derived from the provision of the universal service would not be considered for the calculation of the administrative charges, therefore reducing the amount paid by the universal service provider and increasing the amounts paid by other operators. The Commission services are examining this issue.

THE CONSUMER INTEREST

Tariff transparency and quality of service

In August 2009, ICP-ANACOM adopted amendments to the Quality of Service Regulation for fixed telephony services[193], which redefined certain parameters and put emphasis on better disclosure of information to users. In March 2009, the regulator published a report on the quality of service of broadband access to Internet services in Portugal, which highlights that upload speeds and network latency are the main differences between fixed and mobile broadband connections.

In March 2009, new legislation entered into force as regards audiovisual service and value added services sent through SMS and MMS[194], where subscribers can opt-out from receiving these services. In 2008, electronic communications services were considered to be essential

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191 Decreto-Lei 123/2009, de 21 de Maio, Decreto-Lei n.°258/2009, de 25 de Setembro.

192 Portaria n° 1473-B/2008, de 17 de Dezembro and Regulamento n.° 300/2009, de 15 de Julho.

193 Regulamento n.° 372/2009, 28 de Agosto.

194 Decreto-Lei n.° 63/2009, de 10 de Maio.

public services, thus adding some additional rules on operators for tariff information, billing and suspension procedures[195].

ICP-ANACOM published a website[196] where consumers can contact their operators in order to check information about roaming prices and conditions, and find out what is the cheapest host operator in a particular Member State.

Universal service

In 2005, the Commission started infringement proceedings because of its concern that the current concession contract, whereby the incumbent operator will continue to provide universal service until 2025, unduly excludes any other operator from being designated as a universal service provider. Following the public consultation launched in February 2008 by ICP-ANACOM and the recommendations submitted to the Government in July 2008, the universal service designation tender seems to be currently under analysis. There is still an open question as to how the current concession contract can be adjusted to the new circumstances. In January 2009, the Commission referred Portugal to the European Court of Justice (C-154/09).

So far ICP-ANACOM has rejected the incumbent's claims for compensation for the cost of universal service (approximately €100 million a year on average): prior to 2001 on the basis that the market had not been fully liberalised, and subsequently on the basis that the data provided were incomplete. The regulator is now preparing a draft decision on the methodology to calculate the costs of universal service provision and on the concept of unfair burden, based on an external study. Both sector and public funds financing options are foreseen under national law for a possible compensation mechanism for the provision of universal service. A public consultation is expected to be launched shortly.

On 12 March 2009, the Court of Justice of the European Communities ruled that by failing to ensure the availability to all end-users of at least one comprehensive directory and at least one comprehensive directory enquiry service in accordance with the Universal Service Directive, the Portuguese Republic has failed to fulfil its obligations under the above mentioned directive (C-458/07). Although some developments took place in 2009 and the subscribers' data of two mobile operators are already available in the directory enquiry service provided under the universal service scope and will be gradually available in the directories, other operators have not yet supplied their subscribers' data to the universal service provider. Therefore, the case is still pending as a comprehensive directory and a directory enquiry service covering all subscribers of telephone services are still not available in Portugal. In October 2009, the regulator issued a decision trying to seek a solution between the relevant operators.

Number portability

Fixed telephony users are increasingly porting their numbers (327 457 porting transactions between January and September 2009) whilst the use of mobile number portability remains low (89 144 porting transactions between January and September 2009). The low churn in the mobile market is a combination of factors such as the difference between on-net and off-net

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195 Lei n°12/2008 amended by Lei n°24/2008.

196 http://www.roaminglight.net

tariffs, preference for prepaid services (sometimes with more than one operator), handset subsidisation and relatively similar offers amongst operators. It seems that sometimes win-back practices occur during the process of porting the numbers.

The average periods for porting numbers have been significantly reduced and are now 5.1 days for porting fixed numbers and 3.7 days for porting mobile numbers in Portugal, measured as from the date when the recipient operator submits the request to the donor operator, which are now below the EU average. Since March 2008, the maximum wholesale price for a ported fixed or mobile number is €4.01 and further reductions are applied for blocks of numbers. The regulator has published in its website retail portability prices, which currently are up to €39.70 for fixed ported numbers and free in most cases for mobile ported numbers.

During 2009, following complaints by several operators, ICP-ANACOM has adopted amendments to the rules for number portability[197]. These new rules establish a reduction to three working days for the maximum period between the subscriber's request and the implementation of mobile portability by the recipient operator and compensations are foreseen both between operators and to users for unduly ported numbers. Other main changes are the time limits for some of the processes between operators, the elimination of a capacity limit for ported numbers per day and simplified conditions for subscriber's identification between operators. The regulator has also clarified the different deadlines in the portability process and the synchronisation of local loop unbundling and number portability.

Although some operators claim that the complexity of the administrative process has increased the new rules seem to have solved most controversial issues raised by alternative operators as regards fixed number portability. Following an investigation initiated by regulator in 2008, in January 2010 the regulator imposed a fine of €0.5 million on the incumbent for having breached portability rules.

Consumer complaints

The regulator cannot issue binding decisions on conflicts between end-users and operators, but only impose sanctions on operators breaching regulatory obligations. An important development is that the regulator, the operators and consumer associations have been discussing the establishment a new national arbitration centre dedicated to electronic communications consumer issues, which should be operational by the beginning of 2010 and will issue binding decisions.

The electronic communication is perceived as problematic sector from the consumer point of view according to the main consumer association. The unit in the regulator dealing with complaints and requests for information received 15 853 complaints regarding electronic communications services in the first half of 2009, which represents a significant increase of 34% from the previous year. For the complaints directly addressed to ICP-ANACOM, the main issues relate to contractual issues and billing and access to Internet is the service that raised the biggest number of complaints per customer (1.87‰).

In June 2009, new horizontal legislation entered into force as regards the operation of call centres for customer service, establishing obligations regarding maximum response time

[197] Regulamento n.° 87/2009, Regulamento n.° 302/2009,and ICP-ANACOM's decision of 15 April adopting the Portability Specifications.

(1 minute), follow-up of requests and processing of calls[198]. The regulator is also studying the need to review operators' procedures to deal with consumers' complaints.

European emergency number 112

Whilst 81% of the Portuguese population know 112 as a number to call in case of emergency in Portugal, only 27% are aware that this emergency number can be called from other Member States[199].

The Portuguese authorities are implementing an overall reorganisation of the 112 system, aimed at reducing the number of answering centres (from the existing 18 centres to 2 main centres, in addition to the centres in Madeira and Açores) and addressing other issues such as linguistic capabilities.

In February 2009, ICP-ANACOM adopted a Regulation[200] that specifies the technical solutions for the provision of caller location information to the authorities handling 112 calls, in particular in relation to the location information's accuracy for mobile 112 calls and the format for the database for fixed 112 calls. The regulator is studying a more advanced solution for locating 112 mobile callers.

Harmonised numbers for harmonised services of social value (116)

As from the beginning of 2008, the numbers 116000 for hotline for missing children and 116111 for children helplines are operational and the service is provided by the Instituto de Apoio à Criança. The numbers 116123 for emotional support helplines, 116006 helpline for victims of crime and 116117 for non-emergency medical on-call services have been reserved, but has not yet been assigned.

Must Carry

In addition to the existing must-carry obligations imposed on cable operators to provide two national and two regional public channels[201], the incumbent was awarded DTT frequencies for free-to-air channels in 2008, which include certain must-carry obligations for six national and two regional public channels.

e-Privacy

The national transposition of the Data Retention Directive (2006/24/EC) has entered into force in August 2009 following the adoption of the necessary legislation[202]. The retention period is one year and costs will be borne exclusively by market players. The national data protection authority, Comissão Nacional de Protecção de Dados, is responsible to sanction possible breaches of the obligations with fines up to €10 million, although it does not have competences to solve consumer complaints, who need to submit complaints on privacy issues directly to the police.

198 Decreto-Lei n.° 134/2009.

199 Eurobarometer Flash survey on the European emergency number 112 (February 2010).

200 Regulamento n.° 99/2009, 23 de Fevereiro.

201 Must-carry obligations on cable operators were imposed under the previous regime. The audiovisual authority, ERG, has not yet taken any formal decision.

202 Lei n° 32/2008 de 17de Julho and Portaria n.° 469/2009, de 6 de Maio.

In October 2009, ICP-ANACOM held an international workshop on fighting against spam where it was highlighted the importance of international cooperation, strengthening enforcing powers and educating citizens. Moreover, the regulator has commissioned a study on networks and service security, which results are expected by middle of 2010.

ROMANIA

INTRODUCTION

Platform based competition has remained vigorous in Romania, while most electronic communication services have further expanded in 2009, even if at a slower pace. However, broadband penetration and fixed telephony penetration are still lagging behind those in most of the other Member States. Lack of availability of traditional fixed connections in the rural area, low computer penetration rate and low incomes aggravated by the economic downturn have still heavily influenced the Romanian electronic communications market.

To overcome these problems, the Romanian authorities established the policy lines for broadband, digital switchover and universal service for the years to come. However, the ambitious objectives set out by these strategies are yet to be implemented before their effects provide sufficient incentives for the market forces to overcome the existing gaps. The Romanian regulator authority for electronic communications, which paid again tribute to reorganisation, endeavoured to keep up the pace and fulfil its regulatory role. Three wholesale markets still need to be reviewed to complete the first review round following Romania's accession to the EU. The independence of the Regulator continues to be problematic in Romania, as it is not yet supported by a stable legal base and some regulatory activities are not separated from ownership tasks.

REGULATORY ENVIRONMENT

Main regulatory developments

In March 2009, the Government restructured the electronic communications regulator by way of an emergency act[203]. The Ministry of Communications and Information Society was also reorganised taking over from the Regulator tasks relating to information technology and domain names.

Upon proposal of the Ministry of Communications and Information Society, the Government approved several important policy papers setting out the way forward for universal service, digital switchover and broadband. However limited progress has been achieved so far in taking practical measures to implement these policy lines.

The infrastructure law is still pending in the Parliament, while amendments have been discussed with the operators. However, before being passed into legislation, the rights of way regime continues to hinder the rolling out of networks in Romania.

A directory of subscribers and associated directory enquiry services have been launched at the end of October 2009 under the universal service regime, supported on a limited database of subscribers.

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[203] Emergency Ordinance no. 22/2009 setting up the National Regulatory and Administration Authority for Communications - ANCOM ('Ordonanța de urgență a Guvernului nr. 22/2009 privind înființarea Autorității Naționale pentru Administrare şi Reglementare în Comunicații'), Romanian Official Gazette no. 174/19.03.2009.

Organisation of the NRA

Following the infringement proceeding initiated by the Commission in January 2009 for non-compliance with the obligation to guarantee the independence of national regulatory authorities[204] enshrined in the Framework Directive, the Romanian Government restructured the electronic communications regulatory authority (hereafter referred to as 'the Regulator') in March 2009.

The new emergency ordinance provides better guarantees to safeguard the independence of the Regulator from both market players and state authorities: it is managed by a president and two deputies appointed by the President of Romania at the proposal of the Government and is responsible before the Parliament, whereas the procedure to dismiss these top officials was limited to specific and objectively justified grounds.

A new president of the Regulator was appointed according to the new procedure immediately after restructuring, but none of the two vice-presidents have been appointed by the end of 2009. The Romanian Senate has failed so far to approve the new emergency act, in spite of the efforts of the Ministry of Communications and Information Society. At the same time, important amendments to the text of the emergency act, in particular as regards the appointment procedure, have been tabled in the Parliament. For these reasons, the Romanian regulatory authority for electronic communications is still not enjoying a stable legal base, which may affect its independence within the meaning of the Framework Directive.

A second infringement proceeding has been initiated by the Commission in October 2009 as it was found that the Romanian Ministry of Communications and Information Society (MCSI) exercises specific tasks, which the EU framework consider to be of a regulatory nature. These regulatory tasks include involvement in the allocation and assignment of radio frequencies, in particular adopting the national frequency allocation plan and preparing government decisions relating to radio spectrum management. At the same time, MCSI exercises ownership and control activities in two companies providing electronic communications networks and services (Romtelecom S.A. and S.N.R. S.A. – 'Radiocom'). However, under EU telecoms rules, Member States that retain ownership or control companies providing these services must ensure effective structural separation of the regulatory function from activities associated with ownership or control.

The Commission services are following these matters closely.

Decision making

In November 2009, following several months of internal reorganisation, the Regulator notified to the Commission the reviews relating to the retail access and calls markets, as well as the wholesale markets for fixed call origination and transit services. The markets relating to broadcasting and the wholesale mobile call termination had been regulated in March and April 2009 following notification to the Commission in February 2009. The wholesale access markets have still not been reviewed and notified, although preparatory work has been carried out over the last year.

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[204] Determined by the measures taken in September 2008 by the previous Government to restructure the Regulator.

In November 2009, the Regulator launched for consultation its Action Plan for 2010, which core objectives include promoting competition, end-user's interests, and broadband Internet access. The planned measures include reviewing the relevant markets[205], implementing the universal service and digital switchover and establishing quality standards for Internet access.

According to the statistical data provided by the Regulator, the appeals against its decisions are dealt with by the Bucharest Court of Appeal in between 2 and 6 months on average, whereas the second appeal before the High Court of Cassation and Justice may take on average between 12 and as much as 30 months. The frequency rate of appeal has been 5%, whereas all judgements rendered so far have found in favour of the Regulator.

The dispute resolution procedure is based on a decision of the Regulator issued in 2003.[206] According to the Regulator, the disputes between providers of electronic communications services are settled in 4-5 months on average, whereas those between providers and end-users take two months on average. As regards the former category of disputes, some providers deplored the length of the dispute resolution procedure in particular cases, which according to the Regulator may be due more to time needed by the parties involved to find a common denominator than to the time taken by the proceeding as such.

In August 2009, the Regulator and the Competition Authority renewed the cooperation protocol to support their active collaboration in promoting competition and fighting anticompetitive practices in the electronic communications and postal sectors.

As regards the cooperation with the Regulator, the market players appeared generally satisfied and considered that their views were taken into account, whereas some of them maintained that the consultation procedure remained rather formal with little possibility to explain the data sent and the concerns the operators might have in relation to the Regulator's proposals.

MARKET AND REGULATORY DEVELOPMENTS

Revenues in the electronic communications sector in 2008 totalled €4.56 billion (3.3% GDP), which is by 18.9% higher than the previous year, one of the highest in the EU. The fixed markets (including broadband and leased lines) contributed €1.788 billion, while the mobile markets €2.773 billion. The total value of tangible investment in electronic communications networks in 2008 was €966 million (0.7% GDP). The investment-over-revenues ratio in the Romanian electronic communications sector was 21.2% in 2008, which is well over the EU average of 14%.

As regards 2009, according to the data centralised by the Regulator, while it is estimated that the growth rate in the electronic communications market has slowed down, it appears that, in terms of lines/connections, fixed telephony and broadband have slightly increased, whereas mobile telephony and cable TV were relatively stable.[207] To face the economic downturn and

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205 In relation to the next market reviews, one operator expressed its concern that regulating fixed termination rates well before the mobile ones will have a negative impact on the revenues of the fixed operators.

206 The Regulator cannot impose, by means of dispute resolution, new obligations which are not related to a prior regulatory measure.

207 Out of four leading market players that have informed on their financial results for the first three quarters of 2009, as compared with the same period of 2008, two of them announced decreases from

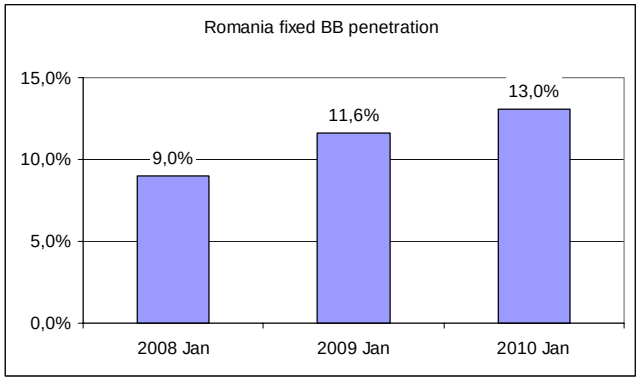
the strong competition in the local electronic communications market, the operators have struggled to come up with better offers in terms of price, speed, minutes included. In 2008 the average price per minute of voice communications was €0.06, less than half of the EU average of €0.13, while the ARPU[208] was €119 (€ 323 the EU average).

Fixed-line penetration remained low, although it has maintained the positive trend observed in 2008. The market share (access lines) of the incumbent has continued to decrease. The take-up of mobile services has continued to increase considerably in the second half of 2008, and it slowed down in the first semester of 2009. The broadband penetration rate has continued to increase steadily in 2009, but is only slightly more than half of the EU-27 average.

According to the Regulator, the total voice traffic over the fixed and mobile telephone networks in the first half of 2009 increased by 22% compared to the first semester of 2008. However, whereas the voice traffic on fixed telephone networks dropped by 15%, the voice traffic (excluding roaming) on the mobile telephone networks from Romania increased by approximately 34% compared to the same period of 2008.

Broadband

Market situation



Broadband market is seen by most of the market players as having the most promising growth potential. The fixed broadband penetration reached 13% in January 2010 compared to 11.6% in January 2009, but it is still one of the lowest in the EU (the EU average stood at 24.8% in January 2010). No more than 28% of the fixed broadband lines belonged to the incumbent in January 2010. As far as the mobile broadband is concerned, the number of mobile broadband active users using only dedicated data cards/modems/keys per 100 population was standing at 2.2% in January 2010 (1.3% in January 2009), while the EU average stood at 5.2%.

The LLU take-up is very low, with 1073 fully unbundled local loops, and only 275 with shared access.[209] The current LLU tariffs were regulated in 2003 based on a retail-minus approach. The Regulator is currently developing a bottom-up costing model for the incumbent's access network based on the TS LRAIC++ standard. The relevant market analysis is scheduled for public consultation in the part of 2010.

As regards the infrastructure used, the Romanian broadband market is characterised by platform based competition. In July 2009, 51% of the market belonged to the UTP/FTP

7.2% to 20.9%, and the third one a reduction of the operational loss of 79.5%. The forth one announced for the 3rd quarter of 2009 the first increase of revenues in the last two years.

208 Annual average revenue per user.

209 Provisional data in January 2010.

(neighbourhood networks, mainly FTTB based), 27.6% xDSL[210] and 17% coaxial cable. Several operators have continued to install fibre in the access networks, but the deployment is limited as compared with the other access technologies. However, in January 2010 the FTTH represented over 3.5% of the total broadband lines, which, in relative terms, is twice the EU average.

The fixed incumbent started to offer VDSL based broadband services that allowed 50% speed increase in 10 cities (e.g. 30Mbps for €14.9/month VAT included). One of the cable operators started to offer, to its new clients, higher speeds (up to 24Mbps for €14.7/month VAT included), while another operator launched broadband connections via its fibre network (up to 100Mbps for €9.26/month VAT included).

During the last year, hotspots were opened at the initiative of MCSI in 250 localities offering WiFi access to Internet[211]; 500 more are planned for 2010. A second project aims at providing broadband access to 2400 schools.

Regulatory issues

Increasing broadband penetration rate in Romania was announced as priority by the MCSI and the Regulator. On 8 April, the Government approved the Broadband Strategy for 2009 - 2015, which is a first step towards a comprehensive approach on the development of broadband in Romania. The working group which should establish the concrete measures to implement the ambitious targets proposed (such as 100% population coverage by 2015) is not yet operational.

The Government earmarked approximately €65 million from the EU funds allocated for ICT projects under the Operational Programme Increase of the Economic Competitiveness to expand broadband in Romania (available until 2015 – implementation phase included). However the approach to implementing this project is not clear yet and consultation with the Commission is under way. The market players appeared interested to participate subject to the choice of approach.

The wholesale broadband access market and the wholesale (physical) network infrastructure access have not yet been regulated. The public consultation is planned for the first part of 2010. Several alternative operators have already expressed their intention to extend their operations using access remedies.

Mobile

Market situation

The mobile penetration rate continued to increase considerably reaching 115% in October 2009[212] (from 103% in October 2008) with 24.78 million active SIM cards, out of which 59% are pre-paid. According to the Regulator, the voice traffic (excluding roaming) originated on the mobile telephone networks in Romania increased by approximately 34% compared to the same period of 2008, thus registering more than 19.5 billion minutes in the first semester of

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210 27.9% xDSL in January 2010, of which 99.9% belonged to the incumbent.

211 According to the statistical data centralised by the Regulator, the number of Wi-Fi hotspot locations was approximately 1000 by mid-2009.

212 The EU average was 121.9%.

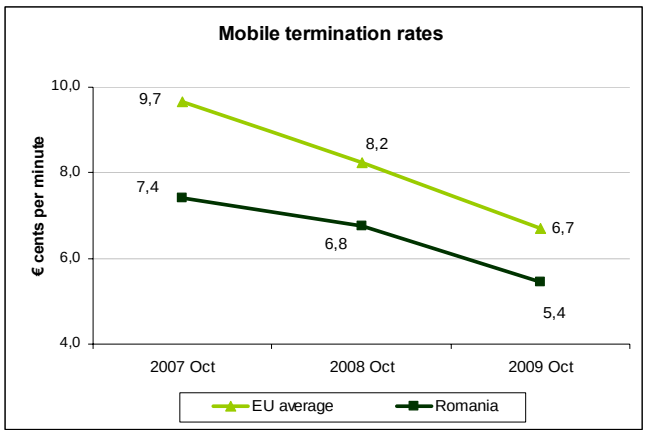
2009, whereas the number of sent text messages (SMS) was 3.5 billion, 96% more than in the same period of 2008.

There are no virtual mobile network operators (MVNOs) in Romania. The combined market share of the first two mobile network operators (MNOs) was 73.3%, while the next two MNOs appear to have increased their market shares. Due to the glide path implemented by the Regulator, the average mobile termination rate has continued the downtrend to 5.44 €-cents[213] in October 2009, below the EU average of 6.70 €-cents.

On 30 June 2009, a take-over by Cosmote, the 3rd mobile network operator in Romania (over 6 millions clients) of Telemobil/Zapp Mobile (over 0.37 million clients) was agreed. The transaction was cleared by the Romanian competition authority at the beginning of November 2009 and together with Telemobil, Cosmote acquired two spectrum licences: a 3G and a CDMA licence and the relating recently expanded networks. Cosmote has become a 3G player in a market so far dominated by the first two MNOs. However, at present, the two providers operate as separate entities.

Regulatory issues

Following the analysis of the market of mobile call termination on individual networks, the Regulator found all mobile operators in Romania to have significant power on the relevant markets. Alongside cost-orientation, the Regulator imposed a full set of obligations to all five operators.



In its comments letter, the Commission called upon the Regulator, in the absence of identifiable objective cost differences, to bring the mobile termination rates of the smaller operators in line with those authorised for the two largest operators from the date of implementing the final measure. The Regulator however adopted its final measure as originally proposed. In particular, price control measures have been imposed as of 1 May 2009, according to an asymmetric glide path leading to 5.03 € cents/minute in 2011.

Roaming Regulation

The Romanian mobile operators appear to have complied with the new EU Roaming provisions, offering the EU retail tariffs. According to the Regulator, up to the third trimester 2009, the two largest mobile operators have offered alternative roaming packages in addition to the Eurotariff. Out of the 13 million roaming subscribers, over 99% subscribed to the Eurotariff.

In 2009, a notable development appears to be the lowering of the standard tariff for data roaming of one MNO to a single tariff of 2.38€/MB from 4.76 €/MB on preferred

213 €0.0677 in October 2008.

networks[214]. In addition, the two largest operators are offering data roaming special tariffs and extra-options.

Given its position of new entrant in the mobile telephony market, the fourth MNO found difficult to enter into Roaming agreements with each of the large EU MNOs and has chosen instead to offer Roaming services to its clients relying on another solution – the use of dual IMSI cards based on agreements with MNOs based in other EU countries. It is able to offer to its customers tariffs below the thresholds provided by the Roaming Regulation[215].

Romania established a legal framework providing for appropriate penalties in case of breaches of obligations provided by the Roaming Regulation.

Fixed

Market situation

In July 2009, there were 34 alternative fixed operators using their own infrastructure to provide access. At the same date, there were 32 managed VoIP operators[216] in Romania and 9 operators which were offering unmanaged VoIP services only. The fixed telephony penetration rate reached 24.1% (3% more compared to the same period of 2008). The voice traffic over the fixed public telephone networks dropped by 15%, i.e. from 4.6 billion minutes in the first semester of 2008 to 3.9 billion minutes in the first half 2009.[217]

According to the Regulator, the total number of access lines for fixed telephone services registered a slight growth reaching 5.19 million, while the total number of subscribers has decreased to 4.07 million, at the end of June 2009. The number of managed VoIP lines increased to 1.5 million in July 2009 (13% increase in the last year). The number of 'Home zone' lines deployed by the MNOs as fixed access solution has increased in one year from 42 000 to 611 000 in July 2009. However, the traffic originated both in managed VoIP and 'Home zone' lines decreased in the first half of 2009 as compared with the previous year (19% and 16% respectively).

Regulatory issues

The market for call termination on individual public telephone networks provided at a fixed location was regulated in 2008 and remedies were imposed on all the operators identified as having significant market power.

In November 2009, following national consultation, the Regulator notified to the Commission the reviews for retail access and calls markets as well as the wholesale markets for fixed call origination and transit services. The Regulator concluded that the incumbent still had significant power in both wholesale markets submitted for analysis, as well as in the retail market for access services. Nevertheless, it considered necessary to withdraw certain obligations imposed on the incumbent.

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214 And €9.52 /MB on the other networks within the EU.

215 €0,33 Euro/minute for outgoing calls, 0,12 Euro/minute for incoming calls and 0,08 Euro/SMS sent.

216 Romania had the second highest market share in the EU on the basis of volume of traffic - 24% in 2008. Starting with 2009 the incumbent is also offering VoIP services

217 Source: ANCOM.

Thus, in the retail access market[218], the Regulator considered necessary to maintain exclusively the obligations of carrier selection and pre-selection and to forbid the conditioning of the purchase of a service by the purchase of another service (i.e. prohibition of unreasonably bundling access with other services). Following the finding of effective competition in the retail calls markets the Regulator withdrew the previously imposed obligations. As for the wholesale call origination and transit markets[219], the Regulator decided to maintain all the obligations previously imposed on the provider with significant power.[220]

In July 2009, there were 25 operators providing carrier selection (CS) services to 59 000 customers and four operators providing carrier pre-selection (CPS) services to 6 000 customers - less customers for these types of services than in 2008.

Broadcasting

Market situation

In Romania there are about 7.2 million households using TV services (out of 7.38 million households), of which approximately 3.4 million are cable-based (46%), 2.3 million satellite-based (DTH — digital signal - nearly 31.2%) and 1.5 million analogue terrestrial (20.3%). As compared to the last year, the number of the cable subscribers (and also providers) decreased, whereas the number of DTH subscribers went up. The cable market is still fragmented among little less than 500 service providers, but the two major cable operators provide services to over two-thirds of cable subscribers. IPTV services, which had been available in the Bucharest area, appeared to take-off in December 2009 as the incumbent started to offer this type of services in ten cities.

In June 2009, the Romanian Government adopted the Strategy on the digital switchover and the implementation of the digital multimedia services at national level, following due public consultation.[221] Furthermore, the Audiovisual Act[222] was amended to streamline the procedure of granting licenses to use radio frequencies, which would be based on a selection procedure organized by the Regulator, following which the selected multiplex operators would be able to deploy networks for terrestrial digital broadcast.

According to the Strategy, the first two of six planed national multiplex will be subject to territorial and population coverage targets, should include the national television services (must carry obligations) and should be assigned through comparative tender procedure by the

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218 As regards the non-imposition of wholesale line rental (WLR), the Commission invited ANCOM to monitor market developments and reconsider imposing WLR should demand from current and potential CS/CPS operators arise for this service.

219 The Commission invited ANCOM to closely monitor the market developments and re-assess, even before the end of the review period if appropriate, whether regulation in this market is still needed.

220 I.e. the obligations: (i) to allow access and use of certain specific network elements and of the associated infrastructure in view of providing the service of call origination at fixed locations and the service of interconnection in view of switched transit, the obligation of transparency, (ii) the obligation of non-discrimination, (iii) the obligation of price control, including tariff cost-orientation and (iv) the obligation of accounting separation.

221 Government Decision no. 1213/2009 on the national strategy for transition to digital systems.

222 Law No 504/2002 relating to broadcasting, as subsequently amended by Government Emergency Ordinance No 181/2008.

end of 2009[223]. The following four multiplexes should be granted by 1 July 2010[224] through competitive tender procedure, and each of which should carry over at least 7 TV programs.

Although it has been delayed from the original planning, the final date to implement this Strategy, and hence the switchover from analogue to digital broadcasting, is officially maintained to 1 January 2012.

The 790-862 MHz band, which is not currently occupied by analogue television, is to be used as buffer band for transition from analogue to digital television for the entire simulcast period. After complete transition to digital television in Romania and the neighbouring countries, this band is to be used completely for other services than broadcasting, according to international rules and market demand.

Regulatory issues

In March 2009, the Regulator issued a decision designating Radiocom[225] as SMP operator in the market for the analogue terrestrial broadcasting transmission of public radio and television programme services. Radiocom was imposed tariff control and cost-orientation obligations. Furthermore, Radiocom is to implement a costing model according to the rules to be established by the Regulator[226], within one year from the adoption date. Until the costing model is implemented, Radiocom is allowed to increase its tariffs for the regulated services only once, subject to the Regulator's prior approval.

Horizontal regulation

Spectrum management

Following the failure of the 3.6-3.8 GHz WiMax tender procedure in February 2009, and the subsequent consultation with the electronic communications operators and providers of equipments, the Regulator has recommended a new strategy for the 3.6-3.8 GHz band in the second half of 2011 to change the selection procedure and to release the 2.5 GHz band for broadband data transmission services on radio support (BWA). An inter-institutional working group has been set up to deal with the opening of the WiMax spectrum.

In January 2009, the Regulator performed the first assessment of the incumbent's compliance with the obligations attached to the CDMA licence obtained in September 2008 for a 10-year term to provide mobile communications services in the 410-415/420-425 MHz bands. The Regulator found that the incumbent fulfilled its obligations, setting up an operational network in over 100 localities of 37 counties.

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223 Postponed for 2010.

224 Subject to the proposals of the relevant inter-ministerial working group and taking into account the market developments and the results of implementing the first step. To implement the digital switchover strategy, MCSI invited all relevant bodies to participate to the working group, which first meeting was scheduled in December 2009.

225 The National Radio-communications Company (Radiocom) is 100% owned by the Romanian State and enjoys a legislative monopoly to provide, on an exclusive basis, transmission services for the public broadcasters, whereas the public broadcasters are obliged by law to purchase transmission services from Radiocom.

226 Launched for public consultation by the Regulator in September 2009.

The competent authorities should also implement the recently adopted GSM Directive[227], by opening up the 900 MHz band, currently used for GSM services, to UMTS services. The Regulator held two public consultations in 2008 and 2009, the second one, organised between 1 September and 1 October 2009, referring to the harmonized use of several related radio frequency bands. Furthermore, at the end of 2011, two of the GSM licences are bound to expire. These processes should observe the objectives set out by the GSM Directive, in particular ensuring least market distortion and a level playing field for all operators.

The Romanian regulatory framework for electronic communications does not contain provisions relating to spectrum liberalisation, but this will be considered when implementing the newly adopted EC regulatory framework. The Commission will follow the implementation process.

The yearly 900 GSM spectrum fees are considered excessive by some market players, in particular under the current economic circumstances, while the Regulator would only concede to their payment by instalments.

Implementation of spectrum decisions

In October 2009, the Commission sent a letter to the Romanian authorities relating to the late implementation of recent spectrum decisions, adopted in 2008: Commission Decisions 2005/513/EC (amended by 2007/90/EC), 2008/411/EC, 2008/432/EC, 2008/477/EC, 2008/671/EC and 2008/673/EC. The national frequency allocation plan[228] was amended in November 2009 to implement these decisions.[229]

The Commission services are assessing the information provided by the Romanian authorities as regards the conformity of the Romanian legal framework with the spectrum decisions.

Rights of way and facility sharing

No substantial progress can be reported in relation to the adoption of a law on electronic communications infrastructure, which should set up clear rules to be followed by the local authorities when dealing with rights of way requests, in a fair, unitary and predictable manner. Nevertheless, during 2009, the draft law on infrastructure, initiated several years ago but not yet adopted, was revised following discussions between MCSI, the Regulator and the industry. The new draft seeks to establish a new regime for infrastructure sharing including a clear prohibition for granting exclusive or special rights for the installation or development of electronic communications networks; the Regulator would be involved in publicly financed infrastructure projects, and a coordinated approach on rights of way related works should be developed. The operators met during the evaluation mission in Romania were unanimous that the revised draft law would benefit to the deployment of electronic communications infrastructure in Romania, while at present they continue to face difficulties in getting rights

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227 Directive 2009/114/EC of the European Parliament and of the Council of 16 September 2009 amending Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community, OJ L 274, 20.10.2009.

228 The National Table of Frequency Band Allocations (TNABF).

229 Order of the Minister of Communications and Information Society No 789/2009, published on 3 December 2009.

of way due to lack of a clear and objective regulatory regime. The Commission invites the Romanian authorities to take the necessary measures to advance the adoption of this law.

As regards the Netcity project in Bucharest, the Municipality passed a new (amended) regulation in May 2009, supporting this project and warned the network providers that they have to go underground in 120 days since the finalisation of the Netcity segments. The Competition Council, the Regulator and MCSI reacted by public statements pointing out to possible inconsistencies with the competition law. The Commission has also requested clarifications in relation to the Netcity project and the conduit of the local authorities in relation to the requests for rights of way.[230]

According to the information available, during the last year, the first part of the Netcity project was finalised and in the city centre all electronic communications networks have been moved underground into the first 12 km of Netcity network. The plan is to cover 1 200 km of streets in Bucharest within the second phase, subject to appropriate financing. Insofar the finalised part is concerned, the relevant operators moved into Netcity's ducts. For the moment only ducts are requested and offered and no dark fibre. The tariff applied is €85/km of duct monthly (i.e. the maximum threshold provided by the contract with the City Hall), which some operators consider excessive[231]. The minimum period for an operator to move its network underground is reportedly 220 days; for the first finalised segment the operators were allowed from June 2008 when they were announced that this segment was ready to July 2009 when the overhead cables were finally cut down. The operator of Netcity and the Municipality of Bucharest have also highlighted that many adjustments have been brought to the initial project to accommodate the needs of each operator. However this view is not shared by all major operators, some maintaining that the Netcity project would determine considerable supplementary costs[232], requiring changes in the structure of its network.

The municipality of Bucharest confirmed that any operator who so wishes may be granted permit to dig in its own network, while admitting that the cost of such works may be too high to be supported by a single operator. This seemed to be confirmed by operators, which expressed the preference that all relevant providers share the costs of digging the trenches and then place in their own ducts.[233]

The Commission services are following the developments on these matters.

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230 In November 2009 (within the evaluation mission), the Municipality expressed its intention to propose amendments of the Decision of Bucharest Council no.252/2008 and the subsequent Methodological Rules, in relation to which concerns were expressed, such as on the prerequisite that the Netcity's operator to approve works on other networks, which should be within the remit of a public authority.

231 The contracting parties maintained that the tariffs have been established before the signature of their contract based on an external study. Furthermore it appears that the tariffs applied are different for other projects, such as in Cluj where, according to the Regulator, the negotiations started at €99 the monthly fee for 100 m of duct, to eventually arrive at €29. Such variety of tariffs highlights the wide margins of discretion enjoyed by the local authorities in granting rights of way to public property and represents one of the issues to be dealt with in the new infrastructure law.

232 The Municipality acknowledged that the costs to move telecoms networks underground would be higher than the tariffs that have been paid so far. It was also highlighted that at present the operators do not pay for all poles that support their overhead infrastructure.

233 It appears that this approach is already implemented in Romania (Brasov).

Administrative charges

There was no complaint in 2009 relating to the monitoring tariff the operators have to pay to the Regulator. Nevertheless, the Romanian legislation on the administrative charges imposed on providers of electronic communications should be reviewed to avoid any risk that charges which do not come under the scope of Article 12 of the Authorisation Directive be passed on operator as administrative charges. The Regulator plans to review the relevant texts on the occasion of implementing the provisions of the newly adopted EC regulatory framework.

THE CONSUMER INTEREST

Tariff transparency and quality of service

Since May 2009, the Regulator required the telephony operators to better inform their customers regarding the services offered and the tariffs involved, so that the latter can make an informed choice. In addition, during the contract duration, any end-user has the right to request and receive a detailed invoice specifying at least the charging period, the tariffs charged, the free offerings/discounts from which the respective subscriber benefited, the full list of the calls initiated and received, alongside their duration.

In 2010, the Regulator plans to start the implementation of an interactive guide, which would allow comparing between the terms and tariffs of electronic communication services available in the market and thus would enable an informed choice for end-users.

Since September 2009, the mobile telephony operators have to unlock, upon request, the handsets locked on their networks, pursuant to a code of practice setting out the minimum standard terms for releasing the terminals locked on the mobile networks in Romania, which was signed in June 2009 by the Regulator and the Association of Mobile Operators in Romania and its members.

Universal Service

A Universal Service strategy was issued by MCSI[234], changing the approach on how to ensure access to basic electronic communications services in conformity with the Universal Service Directive. The main policy objectives relate to providing universal access at a fixed location[235] and a comprehensive directory of subscribers and directory enquiry services, as well as better access to public payphones and to the public telephony services for disabled people. The Regulator plans also to reform the Universal Service national framework to adjust the financing and compensation mechanism to the principles established in the Universal Service Directive.

The implementation of the new Universal Service Strategy started with an assessment of the state of play and the needs of basic electronic communications in Romania. The study revealed significant gaps between the rural and the urban areas as regards the penetration of the communications networks. For instance, approximately 80% of the total fixed telephony

234 Approved by the Minister of Communications and Information Society by Order No 461/27.05.2009.

235 The goal is to ensure countrywide connection at fixed location by the end of 2012, and represent a shift from the 'Tele-centre' approach carried out until 2008, which has not satisfied the requirements of the Universal Service Directive.

subscribers are living in the urban area, whereas almost all of the population has access to mobile telephony services.

To address these issues, the Regulator plans to launch in 2010 a series of public consultations on the most suitable methods to ensure that all Romanian citizens benefit from telephone and Internet access services[236], following which, based on the reformed national Universal Service framework, the Regulator will designate one or more Universal Service providers to ensure a connection capable to uphold the provision of telephone services (including emergency calls) and internet access services based on the principles of efficiency, non-discrimination, technological neutrality and minimum market distortion.

A directory of subscribers and a directory enquiry service have been finally made available since 31 October 2009 under the universal service regime, following the designation in June 2009 of the universal service provider for a two years period.[237] However, at the date of launching this service only several telephony operators had communicated to the universal service provider their databases of subscribers. Furthermore, it appears that only a limited number of mobile telephony subscribers have been included in the comprehensive directory as this category of customers have to give their express consent before being included in the database (an opt-in clause).

Romania has registered a considerable delay in complying with the requirements of the Universal Service Directive mainly due to the difficulties faced in ensuring basic access to electronic communications in the rural area. Therefore, to be able to follow the implementation process, the Commission asked in November 2009 the planning covering concrete measures and their timeline to ensure compliance with the Directive, which should develop on the objectives set out by the recently adopted Universal Service Strategy.

Number portability

Number portability is available in Romania since 21 October 2008. By October 2009, more than 144 000 numbers were ported, out of which 68% were mobile telephony numbers. The Regulator's statistics show that 75% of the numbers ported related to post-paid subscribers. As the end-user does not have to pay for the porting, some operators are of the view that the wholesale charges, which have to be supported by the recipient operator, are too high (€11/mobile number ported and €13 for fixed)[238]. In practice, it takes 8.5 days on average to port a number.[239]

Consumer complaints

The Romanian Consumer Protection Authority (ANPC) enjoys general competence to deal with consumer complaints. At the same time, for specific areas ANPC needs technical support from the authorities specialised in those matters, such as the Regulator. Unlike the Regulator, ANPC has also the competence to apply sanctions on the operators which breach the rights of

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236 The Regulator plans to establish the bandwidth for such access, in accordance with the national needs and the content available on the Internet.

237 The Regulator has also allotted 118 (xyz) numbers to other 11 providers (in addition to the universal service provider) of directory enquiry services, extending in May 2009 the period allowed to activate such numbers.

238 In January 2010, the Regulator submitted to public consulation a proposal to reduce these tariffs.

239 The Romanian regulatory framework allows maximum 10 days to port a number.

consumers. When a consumer complains against an operator to the Regulator, the Regulator tries to mediate the dispute, and when an amiable solution is not possible the consumer may be directed to ANPC.

For these reasons, in November 2009, the Regulator and ANPC were in the process of concluding a revised cooperation protocol with a view to enhance the protection of consumers in the field of electronic communications.

From May to October 2009, ANPC received 665 complaints relating to the electronic communications services, most of which refer to the quality of handsets or services offered (deviations from the parameters of the broadband specified in the contract, type of TV channels offered) and unfair contractual terms. Similarly, the issues brought by consumers to the attention of the Regulator have related to pricing and billing, network/service failure and quality as well as the lack of compliance with the contractual terms.

European emergency number 112

In Romania, 112 has become the single number for emergency calls. Calls to 112 can be handled either directly or by transfer to another PSAP in English, French, Hungarian, German, Russian and Spanish. Caller location is based on the 'Push' method. Activities to promote awareness of 112 have included various means such as display on emergency vehicles, in public pay phone booths and telephone directories, as well as dedicated programs and campaigns, information on websites schools, press.

The three months pilot project aimed at deterring the number of abusive calls to 112 (by sending high number of warning SMSs to those making abusive calls to 112) was run from March to June 2009. According to the Regulator's assessment, this project has made limited and transitory impact on this type of calls, opinion which appears not to be shared by the Service for Special Telecommunications (STS) - the authority operating the 112 system. Consequently, the Romanian authorities are considering implementing a coordinated set of response measures, which could include not only warning text messages, but also temporary disconnection of the subscriber and imposing fines.

A recent survey[240] indicated that in Romania the majority of respondents (54%) reported having received information about 112 as the European emergency number in the past 12 months. While 86% of the respondents knew 112 as a number to call in case of emergency in their own country, 36% of the respondents knew that they can call emergency services across the EU by using 112.

Harmonised numbers for harmonised services of social value (116)

At present, two numbers harmonised services of social value are operational: 116 000 – hotline for missing children and 116 111 – child helpline. The Regulator decided to publish on its website the availability of the reserved 116 numbers and the assignment conditions.

[240] Eurobarometer Flash survey on the European emergency number 112 (February 2010).

Must carry

There have been no substantial developments in the last year as regards the must carry regime. However, must carry might get more attention with the switching over from the analogue to digital terrestrial television services, as there will be a limited number of multiplexes[241] carrying a maximum number of channels.

Data protection

At the beginning of 2009, while preparing to launch comprehensive directory services, the Regulator and the National Authority for Surveillance of Personal Data Processing (ANSPDCP) had to work closely to harmonise their views as to how telephony subscribers should be protected in the process of transferring the subscribers personal data from their telephony providers to the provider of the directory services. Eventually, the two authorities issued a common position which included a series of clarifications and recommendations on the applicable regulations.

These preparatory works have delayed the development of the database for directory of subscribers / directory enquiry services, and therefore this service has been launched at the end of October 2009 under the universal service regime, relying on an incomplete database.

As regards the Data Retention Directive, reportedly transposed in November 2009, the national act implementing it in Romania was found to be in breach of the Romanian constitutional principles in October 2009. The Romanian authorities would have to adjust accordingly the national legislation to the requirements of the Directive. However, in the meantime, this Data Retention Directive cannot be applied in Romania.

[241] Only two multiplexes are planned to be released in the first stage; these include certain obligations attached to the licences, such as broadcasting the national public TV programs.

SLOVAKIA

INTRODUCTION

The pace of broadband growth is accelerating with an average of 3.9 new fixed broadband lines per 100 inhabitants between January 2009 and January 2010. Competition in broadband based on infrastructure shows further progress, however, the DSL segment of the market remains in the hands of the incumbent. Fibre roll-out is one of the more advanced in the EU. The new mobile entrant gains in subscriber numbers. Parallel digital and analogue broadcasting commenced at the end of 2009.

The NRA continued with further market reviews but the progress was slow. The regulatory action in several key markets has not yet brought the expected effects - the markets of local loop unbundling and bitstream, and the fixed markets showed stagnation in development towards more competition. More effort is therefore needed to tackle the market deficiencies so that through competition, effective regulation helps to enhance user benefits. A national public broadband project aimed at providing broadband access in underdeveloped municipalities has been launched in 2009.

REGULATORY ENVIRONMENT

Main regulatory developments

The Slovak NRA, *Telekomunikačný úrad Slovenskej republiky* (Telecommunication Office of the Slovak Republic), TÚSR, has finalised the first round of market reviews with the notification of the wholesale market for the trunk segment of leased lines. The results of the second round of reviews have now been notified with respect to five markets in total[242].

The Ministry of Transport and Telecommunications (thereafter the 'Ministry') prepared an amendment to the Electronic Communications Act, introducing *inter alia* the possibility of sanctions related to the new EU roaming rules, state financial support for digital broadcasting, and further details with regard to access to mobile subscribers' addresses provided for directory services.

New national policy on electronic communications, adopted in May 2009, evolves around three main priorities: digital switchover, development of broadband, and harmonisation of the national legislation with the new EU telecoms package. In December 2009, the Government adopted an amendment of the national frequency allocation table in order to reflect the changes of technology usage established by the amended GSM Directive.

Organisation of the NRA

The NRA continues to face difficulties related to resources in budget and personnel. More financial resources should prove beneficial in acquiring external assistance for certain regulatory tasks, such as for example an establishment of cost accounting methodology models for price regulation. It has been noted in this context that the revenues generated from

[242] Markets of the minimum set of leased lines (notified in 2009), fixed wholesale origination (2007), fixed wholesale transit (2009), mobile wholesale termination (2009) and fixed retail access (formerly two retail access markets, 2007).

fees for rights of use and administrative charges highly exceed the regulator's budget. However, the revenues cannot be maintained by the NRA and are channelled back to the State budget.

A new chairman of TÚSR took office in February 2009 after the previous chairman was dismissed by the Parliament at the end of 2008. The Commission has opened an infringement proceeding against Slovakia based on concerns that the national legislation setting the provisions for a dismissal of the NRA's management did not appear to respect the EU rules on regulatory independence. The Governemnt proposed an amendment of the relevant legislation. The Commission was closely monitoring the developments in this respect.

Decision-making

The progress of the second round of reviews has been slow: throughout the reporting period, the regulator notified the results of review for three markets (former markets for fixed transit services and minimum set of leased lines, and mobile termination market). The final regulatory decisions with respect to the two latter markets were yet to be taken. Notification of the review for the local loop unbundling (LLU) market was withdrawn.

Although TÚSR has initiated the process of three-criteria tests with respect to other former markets excluded from the current Recommendation[243] already in 2008, the results are yet to be notified. More effort is therefore required to complete the market reviews in the second round. As the last reviews for the former retail access markets as well as the wholesale origination market were not followed by a formal regulatory decision on significant market power (SMP) and related obligations[244], even though the markets were assessed non-competitive, the Commission recalls the need to review these markets again as soon as possible and follow the procedures as laid down in the regulatory framework.

The NRA spent considerable efforts on the mobile termination market. Commercial negotiations on the mobile termination rates (MTR) had been failing until the end of 2009; the NRA thus set the MTR levels through a preliminary measure. Such a regulatory decision surely strengthened the legal certainty in the market, however, the Commission notes the high level of asymmetry applied, as well as the fact that such rates were set above the EU average.

The remedies in place with respect to key markets are yet to take the desired regulatory effects in triggering more effective competition and consumer benefit. In many instances, effective enforcement action and follow-up to implementation of remedies are absent. Various practices applied by the SMP player hinder the intended effects of regulation, met mostly by a lack of formal regulatory response (with regard to reference offers, for example). Therefore, a pro-active identification of key competition bottlenecks and timely regulatory action on the part of the regulator should prove beneficial for the further market development. The market

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243 Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC, OJ L 344/65, 28.12.2007.

244 As regards the retail access markets, the SMP decisions and remedies based on the first round of review remained effective, however, no formal new decision on SMP and remedies was taken following the second round. With respect to the second review for the wholesale fixed origination market, a new decision of TUSR was taken only as regards new cost based price obligation, based on a price calculation model established by a separate decision of the NRA.

players would welcome more detailed remedies and transparency as regards the regulatory process.

MARKET AND REGULATORY DEVELOPMENTS

Total turnover and investment figures of the Slovak telecommunications sector show a general increase in comparison with 2007. The total turnover stood at €2.24 billion as of 31 December 2008 (increase of 20.8%); the revenues from the fixed market increased by 22.0%, whereas the mobile market revenues increased by 19.8%. The total value of tangible investments was €405 million (increase of 4.5%); investments made by mobile operators increased by 1.7%, while tangible investments by alternative operators into fixed telephony decreased by 22.7%, and investment of the incumbent fixed operator increased by 23.8%. The total revenue represented 3.3% of the national GDP.

The trend towards fixed and mobile convergence is developing gradually. Two major market players (largest mobile operator and the fixed incumbent via its mobile subsidiary) can now offer complete converged fixed and mobile solutions for broadband, voice and TV services. Although bundles of quadruple services have not been introduced yet, the number of operators offering bundled services has increased, especially as regards offers of bundles linked with broadband. Cable operators, even the smaller local ones, strive to offer more bundles with their 'core' TV service. Several fixed alternative players provide internet protocol television service (IPTV) over its own fibre infrastructure.

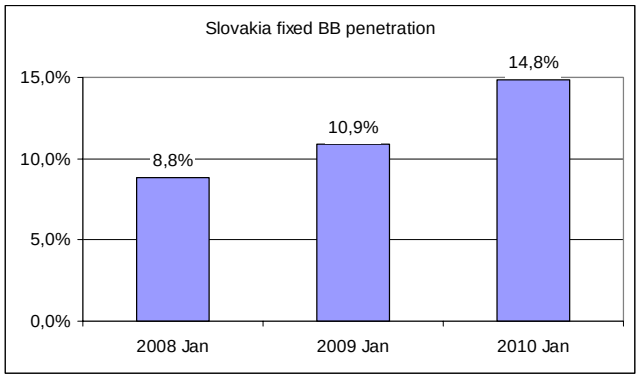
Progress has been noted with regard to development of the next generation infrastructure (NGN). The prevailing technology currently rolled out in Slovakia is fibre to the home (FTTH) in the point-to-multipoint topology. Two largest operators in this regard – the incumbent and the largest mobile operator each cover approximately 303 000 and 301 000 households (respectively)[245]. The third major fibre player (a fixed alternative operator) has reported to cover additional 70,000 households mostly in larger cities; other fixed alternative players deploy NGN networks on a more limited geographical scale, focusing mainly on the local residential market segment or 'greenfields' and selected business customers. The largest cable operator deploys hybrid fibre networks in twenty cities. Fibre roll-out is thus at an advanced level, but at this stage, fibre optic access networks cover mainly large and densely populated cities.

The market situation in 3G services has not changed substantially over the past year. Further roll-out of 3G infrastructure progressed on a minimal scale. At this stage, the new mobile entrant is not considering further development of Universal Mobile Telecommunications System (UMTS).

[245] State of play as of December 2009. The coverage of individual networks overlaps in many geographical areas.

Broadband

Market situation



The fixed broadband market experienced a notable growth in 2009. The fixed broadband penetration rate increased by 3.9 percentage points from 10.9% of population in January 2009 to 14.8% in January 2010. The accelerated pace of broadband growth is represented by 213 292 new fixed retail broadband access lines over a period of 12 months, which, with an average of 3.9 new fixed broadband lines per 100 population, is one of the leading in the EU. Despite such progress, however, in the context of the European ranking, Slovakia remains well below the EU fixed broadband penetration average of 24.8% and well behind the top performers. The mobile broadband penetration rate (for dedicated data service cards/modems/keys) is at the rate of 5.1% of population slightly below the EU average of 5.2%. The speed levels available in the market have increased. Compared to 2008, more retail fixed broadband lines provide higher speeds: 22.1% of the lines now deliver speeds of 10 Mbps and above.

The Slovak fixed broadband market shows healthy signs of infrastructure based competition between digital subscriber lines (DSL) platform (45.8% of total fixed retail lines); wireless local loops (WLL) (18.3%); ethernet, local area network (LAN) and other platforms (13.6%); FTTH (11.0%); and cable (10.6%) As for fibre connections, Slovakia is one of the better performing EU countries in terms of ratio for FTTx over the total amount of fixed broadband connections.

The overall market positions of incumbent and alternative players have started to show some dynamics: the incumbent's market share has decreased to 44.5% of total fixed retail broadband access lines.

By contrast, the state of play in the DSL segment of the fixed broadband market practically mirrors the situation in 2008. The incumbent maintains a very strong position with 92.1% of retail DSL lines; the share of the fixed alternative operators in the DSL segment is a minor 7.9% of total DSL lines. At the turn of the years 2009 and 2010, first lines were unbundled on the basis of the first LLU agreement signed in March 2009. The intended target LLU customers are from the business segment, as the residential part of the market is not considered able to provide a sufficient return on investment. The fixed alternative players use the incumbent's commercial wholesale product of internet protocol (IP) bitstream, focusing predominantly on the business sector. The largest fixed alternative players, mainly due to difficulties in competing via use of the incumbent's wholesale DSL products, are gradually moving away from the third party infrastructure to development of their own networks. Such network deployment is however slow and limited in scale. The wholesale DSL products remain of high importance, in order to allow new entrants to achieve a national coverage, or to enable a potential new market entry.

The largest mobile operator is the most notable provider for FTTH, offering broadband speeds up to 70Mbps and bundles with other products. It has so far focused mainly on residential customers. Broadband over cable is offered by an several of providers, however, geographical and technological constraints, in particular as regards smaller operators, represent the most important limitations for this platform. The largest cable operator introduced a retail broadband product offering the highest national speed level of 120 Mbps.

Slovakia has launched a national public broadband development programme under the auspices of the Government Office. The aim is to bring access to broadband infrastructure in 'white areas' (i.e. areas with no broadband access) and in the “grey areas (areas where only one broadband network operator is present) as identified by a feasibility study carried out for this purpose. The target speed to be delivered over these new networks is 1024 Kbps (download) and 512 Kbps (upload). The programme is established on a demand-driven basis, i.e. project requests are submitted by the relevant local municipalities. Financing is to be covered mostly from the EU funding. The first calls for proposal were planned for the last quarter of 2009, however, it appears that the process will progress in a slower pace than indicated in the initial timing. Several operators have already expressed their intention to participate in the process. Projects to develop regional infrastructure between the municipalities and the core network are planned to run in parallel. The Commission notes the need for a reinforced cooperation between the relevant national authorities in respect to these public broadband schemes.

Regulatory issues

Despite the price drops in LLU introduced by the SMP undertaking in May 2009, the total average monthly cost is at the level of €10.19 per fully unbundled line and €4.95 per shared access still above the EU average. Pilot sites for collocation in Bratislava have been built in order to start the process of implementation of the first LLU agreement. Though it is a definite step forward, the agreement does not appear to have resolved the collocation concerns identified by operators as the main reasons for the lack of unbundling. The solution used is an external collocation in facilities nearby the unbundling points, however, reported high prices and lack of transparency for internal collocation remain to be an issue. The same applies for bitstream collocation. The process of LLU take-up appears to be affected also by technology limitations to deliver high-speed connection. A second review for the LLU market, notified to the Commission in June 2009, was withdrawn by the NRA a month later. The market definition excluded alternative technologies such as fibre, fixed wireless access and cable from its scope.

The regulation in the bitstream market has been imposed since January 2009. Previously in 2008, the Supreme Court suspended the effect of the remedies and returned the matter back to the NRA for a new decision. A full scope of remedies, including price regulation based on a fully allocated historic cost (FAHC) model with retail minus principles has been imposed. The reference bitstream offer (RBO) includes wholesale bitstream products both on an IP and asynchronous transfer mode (ATM) level. The ATM bitstream as provided in the RBO is not considered a commercially viable and profitable product, thus it is not taken up. The IP bitstream of the RBO is simply a combination of two wholesale products commercially available in the market. As there are no differences between the regulated and commercial product, the alternative players continue using the latter as per contracts signed before RBO was made available. Alternative operators note limitations of this wholesale product in order to offer a differentiated service to their customers. Another main issue of concern is that

interconnection is allowed for only at one aggregation point for the whole national territory. In this context, the Commission notes the market demand for access at ethernet level, and invites the NRA to take this into consideration at the following review for the bitstream market.

In April 2009, the Commission opened an investigation against the fixed incumbent for suspected breaches of the EU competition law. The practices under investigation involve amongst others refusal to supply and margin squeeze with respect to LLU and other wholesale broadband services.

The overall impact of the regulation imposed with respect to broadband-related markets appears to be very limited. The reference offers, though available, do not seem to enhance transparency in a sufficient manner. There has been no further regulatory response with respect to the issue of prices and other practices, particularly as regards facilities collocation. In practice, regulation of the bitstream market did not lead to any alternative to the commercial wholesale IP product already in place when the market was assessed effectively non-competitive. The resulting effects were such that LLU was not put in practice (although preparations have been initiated by one player), and RBO did not bring forward noteworthy effects. The Commission therefore urges TÚSR to review these markets as soon as possible and address the competitive deficiencies through regulatory measures targeted at the identified bottlenecks. Dedicated enforcement of the remedies along with continuing monitoring for potential market constraints should play an integral part of the market review process.

Mobile

Market situation

Mobile penetration is relatively high at 100.0% of the population with three players competing in the market. Although the market situation has not altered substantially compared to the last reporting period, the new entrant is growing in subscriber numbers, reaching the market share of 9%. This player has reached 2G coverage of 96% of the population and continues to build its network while using the national roaming service. Its retail products introduced a different approach to tariff transparency by moving away from the traditional concepts of on net/off net and peak/off peak calls. The market shares of the other two players stood at 53% and 38%.

The gradual shift from pre-paid to post-paid services is becoming more pronounced with 64% of subscribers now opting for the latter. The average retail price per minute has increased slightly, and at the rate of € 0.13 corresponds to the EU average. The annual average revenue per mobile users has decreased to a small extent. The Slovak figure of € 252 is below the EU average of € 323. The market players appear to exert competitive pressures, and in fact, the retail prices have decreased in 2009[246].

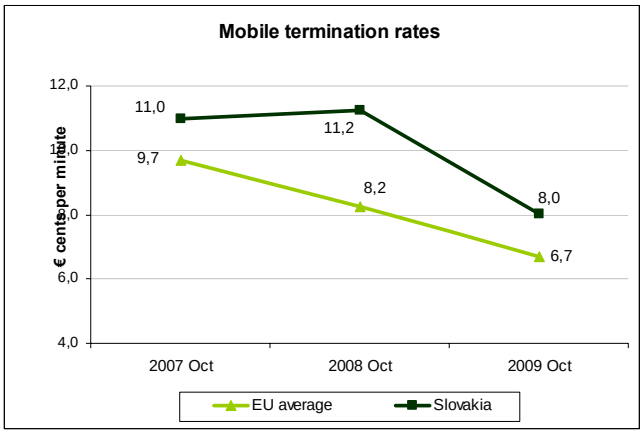
Mobile virtual network operators (MVNO) are not present; the new entrant cooperates with three simple resellers.

[246] Source: Telligen Report on Telecoms Price Developments from 1998 to 2009, December 2009; post-paid usage baskets (low, medium and high) using 2006 version of the OECD basket.

Regulatory issues

The results of the second round of market review for the mobile termination market were notified in March 2009. The NRA proposed to designate all three operators with SMP and impose a full set of remedies, including price control based on an FAHC model which may be complemented by benchmarking. As regards the price obligation, the Commission noted that the proposed cost model, though transitional in nature, did not respect the need for forward looking approach based on costs of an effective player. The cost accounting methodology was adopted in November 2009 as proposed. Nevertheless, TÚSR has changed its approach in the final measure on SMP and remedies adopted in January 2010, where the level of maximum mobile termination rates (MTR) was set on the basis of benchmarking.[247]

The Commission also expressed its concerns about the absence of price regulation following the first round of review. Given the inability of market players to negotiate commercially the MTR applicable for 2009 with respect to the new entrant, the Commission urged the NRA to impose a transitional price control obligation based on international benchmarking to be replaced as soon as possible by cost-oriented prices.



After continuing unsuccessful commercial negotiations on MTR and delays in pending dispute in this regard, the NRA determined the level of MTR in August 2009 in an urgent measure. The asymmetric rates were set at 7.92 €-cents (incumbent players) and 9.25 €-cents (new entrant), and in particular with respect to the latter, were well above the EU average of 6.70 €-cents. The Commission notes that despite TÚSR's declared commitment to phase out asymmetries, a higher asymmetry was authorised by the interim measure than applied before. The interim measure ceased to be effective at the end of December 2009, when all three market players concluded commercial agreements on the level of MTR for the years of 2009 and 2010. In this way, the market players resolved the ambiguity of the MTR levels for the period between the interim measure and beginning of 2009.

Roaming Regulation

All three mobile operators appear to have complied with the price caps on voice, SMS and data services as required by the Roaming Regulation. The eurotariff offered mostly mirrors the maximum amounts set by the Regulation. Besides the option of eurotariff, other special roaming packages and tariffs are available. The standard retail data roaming prices are in some instances charged well above the maximum wholesale price.

247 The maximum MTR were set at the level of € 0.0635 for the incumbent players and € 0.0768 for the new entrant as a transitional measure until methodology based on long running incremental costs (LRIC) is available. These price caps are effective from 1 February 2010 until the end of the year. The benchmarking method chosen was based on a simple arithmetic average of the MTR for those Member States applying LRIC.

Fixed

Market situation

In general, there have been few developments and the market situation largely reflects that of the previous reporting period. With the fixed penetration rate of 19.6 %[248] and most of voice traffic carried over mobile networks, there are continuing signs of fixed-to-mobile substitution. The position of the incumbent remains unchallenged with a relatively stable market share of 94.6% by volume and 85.2% by revenue. Minor 5.6% of subscribers use an alternative provider for direct access to publicly available telephone services (PATS). There are ten fixed alternative players using proprietary infrastructure. The fixed alternative players are most competitive in providing international calls where their market share by revenue has increased to 20.5%.

Operators providing services via carrier selection (CS) using the incumbent's network note continuing gradual declines in the volume of CS traffic, hence their shift of focus towards more commercially viable services such as broadband and provision of voice over IP protocol (VoIP). The market share of VoIP operators based on the volume of traffic is still marginal at 3.6%. The fixed voice services are increasingly offered as a part of a bundle, mostly together broadband and/or TV.

Regulatory issues

In November 2009, the regulator notified the second round of market review for the former retail market of the minimum set of leased lines concluding that the market failed to fulfil the three-criteria test. The Commission urged the NRA to review this market after it had been withdrawn from the national list of relevant markets susceptible to ex ante regulation without any prior analysis or notification to the Commission. On the national level, such situation has invoked legal uncertainty as to the effect of remedies imposed with respect to this market in 2007, at least until the Supreme Court cancelled the regulation in March 2009, following an appeal of the incumbent. The Commission recalls the need to review all the remaining former markets excluded from the current Recommendation and notify the results of the national analyses as soon as possible.

The price caps for the fixed call origination charges introduced in November 2008 have brought the relevant wholesale charges down. Nevertheless, the price reduction does not appear to have triggered the expected market response. The fixed alternative players note that the regulation in this respect has come too late in time to generate a more significant impact. Besides the issue of timing, new entrants emphasize that other unregulated 'implementation' costs charged by the SMP player in addition to the fixed origination rates have an effect on the final cost of service provision. As regards the fixed termination charges, the price caps based on LRIC model were suspended by the Supreme Court's decision on the appeal of the incumbent. The interconnection charges for terminating calls on the incumbent's network remained well above the EU average.

In February 2009, TÚSR issued a new decision on remedies with respect to the wholesale transit market. The previous regulatory decision, based on the first round of market review, was cancelled by the Supreme Court in October 2008 and returned to the NRA for a new

248 The penetration rate based on data from TÚSR.

proceeding. Obligations for non-discrimination and transparency were imposed, however, the proposed remedies of accounting separation, access, and price control, originally notified to the Commission, were left out. The second round of review for this market was notified in August 2009. Based on the results of the three-criteria tests, regulation was withdrawn in November 2009.

The results of the first round of market review for the wholesale market for trunk segments of leased lines were notified to the Commission in January 2009 (previously twice withdrawn). The analysis concludes an effective competition in the market.

In general, more progress is needed in terms of further market reviews. The remedies imposed in the fixed markets so far do not appear to address the competition deficiencies in an efficient way and the level of competition appears to be continuously stagnating. Increased regulatory attention is required as to effective enforcement of the regulation in place, in particular with respect to the reference offer provided, with a view of removing the identified bottlenecks where necessary. The market could benefit from a more timely market review and adoption of remedies.

Broadcasting

Market situation

As of July 2009, the market situation in the TV broadcasting reflected the following picture: analogue terrestrial transmission provided services to 0.7 million of households (40.3% of total households), cable TV held a strong position as received by an estimated number 0.7 million of households (37.9%), satellite TV followed with 0.5 million of households (26.3%), and IPTV completed the picture with 0.1 million of households (5.3%).

Three major players are offering IPTV service. Their uptake has increased but this platform is yet to have a more significant impact on the market dynamics. The transition to digital broadcasting has almost been finalised with the larger cable operators. The smaller cable players face difficulties in upgrading their networks - their main concerns appear to relate to the need to build a digital head-end to provide sufficient connectivity to each municipality.

Regulatory issues

In May 2009, the regulator re-launched the two tender proceedings for three digital terrestrial transmission (DTT) multiplexes. The winning undertaking was granted authorisation for the launch of one publicand two commercial multiplexes. The selection criteria of the new tenders were amended to some extent when compared to the previous proceeding (cancelled in December 2008). In particular, the call for tender introduced a requirement for contractual agreements between network provider and broadcasters, increased the requirement for financial guarantees, and did not specify a particular compression standard.

The DTT network provider started parallel transmission with declared coverage of 80% of population at the end of 2009. Parallel transmission was started with a transitional multiplex

which contained only channels above 60 (frequency band of 790 – 862 MHz).[249] The practical details for the procedure of the analogue switch-off are yet to be determined, although the general principles and guidelines are laid out in the enactment "Principles for the Transition to the Digital Broadcasting".

The Ministry has launched a national information campaign on the digital switchover. The campaign, based on principles of technological neutrality, is to continue until the completion of the process in 2012. Information on user benefits brought forward by digitalisation and on switchover technical details is provided at a dedicated website, through public spots on TV, and via paper press. The Government plans to support the transition by state aid vouchers for the purchase of end-use devices (set-top box, digital TV receiver, external PC module or satellite device).

The NRA was still to review the wholesale broadcasting market which has been excluded from the current Recommendation in order to determine whether it is necessary to continue with regulation in this market. A full scope of remedies, including cost-orientation based on FAHC model, currently apply.

Horizontal regulation

Spectrum management

In March 2009, TÚSR carried out its first public consultation on the issues related to digital dividend. Digital broadcasting and mobile broadband are foreseen to be viable candidates for the use of spectrum released by the analogue switch-off. The choice of technology for the receipt on mobile terminals is yet to be determined. As regards further digital broadcasting, eight national multiplexes are to be reserved for DTT (including one multiplex in frequency band 790 – 862 MHz). Creation of further local or regional multiplexes may also be possible. The general nature of the results of the public consultation seem only to kick-off the national debate with this agenda and do not yet bring forward concrete and detailed steps in terms of deliverables and planning. The Ministry prepares further public consultation on the issue of digital dividend in 2010[250].

Further authorisations were granted by the NRA for the provision of local fixed wireless access (FWA) networks (10 GHz spectrum band) in 22 municipalities and authorisations were issued for 37 FWA networks. The new networks are expected to improve the accessibility of broadband services in the given regions.

Spectrum trading is provided for in the legislation but has not been applied in practice yet. The NRA did not note any interest for such secondary trading in 2009. The NRA is planning to update the relevant parts of the Utilisation Plan of Frequency Spectrum, in view of the amendments to the national frequency allocation table brought forward with the aim of transposing the amended GSM Directive.

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249 The transitional multiplex entails both public and commercial channels. As of 1 July 2010 two additional multiplexes are to be initiated, thus creating a set of three multiplexes (one for public and two for commercial broadcasting).

250 This is linked to a new national strategy on digital dividend to be published by the Ministry in 2010.

Implementation of spectrum decisions

The Slovak authorities have declared the implementation of the following radio spectrum harmonisation Decisions adopted by the Commission: Decisions 2005/513/EC, 2005/928/EC, 2006/771/EC, 2006/804/EC, 2007/131/EC, 2004/545/EC, 2005/50/EC, 2007/90/EC 2007/98/EC, 2008/294/EC, 2008/411/EC, 2008/477/EC, 2008/432/EC, 2008/671/EC and 2008/673/EC. The implementation of Decision 2007/344/EC on the harmonised availability of information regarding spectrum use which ensures accessibility of the radio interface specifications on the ERO Frequency Information System (EFIS) database is under way.

CONSUMER INTEREST

Tariff transparency and quality of service

Operators and service providers have the obligation to provide consumers and end-users with information on applicable tariffs, prices, and terms of service, including service quality. Such information has been provided solely by the individual operators and service providers. Neither public authorities nor the industry offer a more complex price/quality information tool that would enable customers to compare and contrast the relevant offers available in the market.

Universal Service

The incumbent continues to provide universal service for all designated elements, including special services for disabled users. The designated provider reports a decreasing interest in the use of public payphones, particularly in rural areas, and notes the need for a further reduction of the density criteria in this respect.

Following a request for universal service compensation, submitted by the incumbent operator to TÚSR for the first time in 2007, the regulator has finalised the net cost calculations for 2005 and 2006. However, the results are not yet publicly available due to a pending appeal of the designated undertaking. The NRA has been assisted with the calculations by an external consultant. No public consultation on the cost calculation methodology or draft net cost amount was foreseen by the NRA prior to taking the final decision. In this context, the Commission notes the importance of taking all tangible and intangible benefits into consideration at the net cost calculations, as well as the need to assess duly the unfair burden before any compensation mechanism is activated. Moreover, the Commission highlights the importance of transparency for the whole process related to universal service financing.

The potential contributors to the funding mechanism have expressed concerns as to the high amount of compensation requested by the universal service provider. Additionally, concerns have been expressed on the fact that the contributing operators have not been granted the status of the party to the administrative proceeding on the net cost calculation. The Commission is monitoring the situation with respect to the costing and financing process.

At present, Slovakia is not considering an inclusion of broadband into the scope of universal service.

Number portability

New secondary legislation effectively reducing the total porting time for both the fixed and mobile numbers to five working days has been in place since September 2009. Such a shortening of time represents a considerable improvement in comparison with 2008, when it took on average 14 days to port a mobile number and 10 days to port a fixed number.

Due to legislative changes introduced, most major operators renegotiated their wholesale contracts on number portability. Although the new secondary legislation did not cover the issue of applicable rates (negotiated commercially), many operators signalled the intention to introduce reductions in the wholesale prices. Through a commercial agreement concluded at the end of 2009, mobile operators thus dramatically decreased their wholesale prices to € 5 for 2010 and € 2.5 for 2011. The fixed incumbent also signalled an intention to introduce reductions for the wholesale price in future. As of October 2009, the prices applicable at the rate of € 33.2 for a mobile number and € 49.8 for a fixed number were in fact the highest wholesale charges applied in the EU.

The retail prices for porting mobile numbers differ with each operator: € 5.56 (excluding VAT) the largest player, € 10.9 (excluding VAT) second player, and no retail charge by the new entrant. The fixed incumbent charges a retail price of € 4 (excluding VAT). The take-up of the facility has not progressed to a great extent: the growth in fixed ported numbers is slow; the take-up in mobile numbers has increased more than five-fold in 2009 but in relation to the overall number of subscribers is yet to have a greater impact (3.3% over total mobile subscribers).

Consumer complaints

Billing issues, tariffs, quality of service and contracts remain to represent the most predominant issues of concern presented by consumers in their complaints to the regulator. The NRA has not noted significant changes in the number of complaints and enquiries received by NRA.

European emergency number 112

The Government has earmarked the single emergency number 112 a political priority. A new office of Plenipotentiary for Integrated Rescue System was established to facilitate the implementation of political objectives. A multinational round table on 112 was held in November 2009 as a public launch of the 112 reform. The expected outcome of the reform covers identification and implementation of new innovative and viable technological solutions for 112 functioning (including widened access for disabled users, eCall, and interoperability systems with neighbouring Member States for border areas), creation of a sustainable institutional infrastructure, and communication and information campaign. An online learning tool on 112 (eBook) is planned to be developed for schools, educating children and students in first aid and 112, including on the issue of 112 misuse.

Citizen awareness for 112 has increased. A majority of respondents in Slovakia (56%) reported having received information about 112 as the European emergency number in the past 12 months, compared to 48% one year earlier. Most of them (94%) had received the information via a media outlet, by watching television, listening to the radio, reading newspapers or surfing the Internet. This has resulted in a significant increase on the number of

respondents who now know 112 as the European emergency number from 46% in 2009 to 55% in 2010, which is one of the highest proportions in the EU[251].

The national legislation on 112 has been amended, effective from September 2009. The new rules set in greater detail the requirements related to provision of caller location information, both for calls from fixed and mobile networks. The measure intends to streamline technological solutions in this area in order to improve cost-effectiveness of the system. The new rules align the quality of caller location information provided to the public rescue centres with that provided by operators commercially.

The high ratio of hoax calls remains to be an important issue of concern for the national authorities. In this respect, calls from mobiles without sim cards appear to raise most difficulties. By virtue of the amendment, the authorities are now able to track the last owners of such phones in an attempt to prevent further misuse.

Harmonised numbers for harmonised services of social value (116)

There are no developments noted with respect to the EU harmonized numbers 116xxx. The numbers 116 000 and 116 111, reserved for missing children hotlines and child helplines, respectively, have been assigned to Orange Slovakia with UNICEF Slovakia as the content provider.

Must-carry

Two additional exemptions to the must-carry regime were granted by the Broadcasting Council in 2009. The more significant one exempts the retransmission of radio channels. The largest cable operator considers a submission to the Constitutional Court to decide on a potential remuneration for must-carry services. In general, the system of must carry obligations in Slovakia appears to be functioning at a satisfactory level.

ePrivacy

The Slovak telecoms regulator and the Trade Inspection have the authority to impose fines on spammers. Overall, not many actions and measures have been taken by public authorities and industry actors in the fight against online malpractices. Slovakia does not participate in international cooperation schemes in this regard. On the other hand, a development towards more targeted approach to internet safety can be observed[252].

Subscriber identification is required for pre-paid cards.

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251 Eurobarometer Flash survey on the single European emergency number 112 (February 2010).

252 Study on activities regarding spam, spyware and malware, time.lex, October 2009.

SLOVENIA

INTRODUCTION

During 2009, despite a rather difficult general economic situation, market trends in the area of electronic communications continued to be positive thanks to the strong take-up of IP-based services (VoIP, Broadband, IPTV) based on high-speed fibre-to-the-home connections. Competition has intensified consistently across the sector and the consumers have benefited from more choice and lower prices, and have availed themselves of a variety of service bundles. 2009 was also a year marked with reorganisation and changes in top management positions of Slovenian authorities responsible for the area of electronic communications.

The regulator (NRA), the Agency for postal and electronic communications (APEK), has been rather active, but a large number of its decisions have again been challenged by the operators. In some cases Court decisions forced the NRA to review its decisions, which delayed the effective implementation of these remedies. Moreover, the regulator designated one additional universal service provider in 2009. On the other hand, more work remained to be done in the area of spectrum management, in particular in relation to spectrum re-farming.

REGULATORY ENVIRONMENT

Main regulatory developments

In December 2009, the Parliament adopted an amendment of the Electronic Communications Act (ECA), which aims at clarifying the legislation in the area of rights of way, powers of the NRA (e.g. functional separation and penalties), frequency management (e.g. with view to prohibit the hoarding of frequencies), user rights (in particular, disabled users rights) and e-privacy. Both functional and voluntary structural separation of the operators is envisaged as a last resort remedy, providing the NRA with additional tools for regulating the market.

In September 2009, in the light of the reorganisation between the ministries, the Directorate for electronic communications in the Ministry of the Economy was merged within the Directorate for information society in the Ministry of Higher Education, Science and Technology, and a new acting director general of the merged directorates was appointed by the Government for a period of six months. An open and competitive procedure for the post of the director general of the Directorate for information society has been launched in November 2009.

Organisation of the NRA

APEK, which has 75 employees, has during 2009 primarily focused on the process of notification of the second round of market analyses and supervision of remedies. In the area of broadcasting, the NRA assigned radio spectrum and monitored obligations on pluralism and content.

In November 2009, the Government took a decision to dismiss APEK`s director, appointed in January 2006. This decision was motivated by procedural irregularities related to the regulator's controversial assignment of the fourth UMTS licence in 2008, which was granted to an alternative operator without any tender and without a fee. Against this background, it

remains to be seen whether the NRA's independence in the exercise of its statutory tasks is fully ensured in Slovenia. The Commission services are looking into the matter.

Since April 2008, the national competition authority (NCA) has a possibility to avail itself of the new provision of the competition act which provides that only ex-officio cases may be investigated by the authority. The law lays down higher fines as sanctions for anticompetitive behaviour by market players, and also sets a deadline of two years for the NCA to complete its investigations.

In September 2009, the NCA signed a cooperation protocol with APEK. Against this background, a cooperation group has been set up, which in principle meets once a month in order to discuss issues where supervisory powers of both authorities overlap, in particular in the mobile market.

Cooperation between APEK and the NCA in practice remains to a large extent limited to the market analysis process, mainly due to insufficient human resources of the NCA.

Decision making

APEK has notified nine market analyses and has issued seven decisions. Four retail markets, related to publicly available local, national and international telephone services provided at a fixed location for residential and non-residential customers, were found to be competitive, and the NRA consequently withdrew regulation from these markets, in line with the Commission recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation. At the time this report was being drafted, APEK planned to issue two additional decisions on the wholesale physical network infrastructure access and wholesale broadband access. However, following the national consultation, the NRA re-notified these two markets. This forced the regulator to delay the adoption of foreseen measures further into 2010.

In 2009 the NRA issued five decisions concerning the supervision of remedies, identifying breaches of several obligations imposed on the fixed incumbent. In this respect, non-compliance with the obligations of equal treatment, transparency and price control issues were identified. As a consequence of this the NRA mandated the incumbent to modify its reference broadband offer (RBO), and also requested the operator to harmonise the prices. In two supervision procedures, which focused on compliance with the obligation of access to, and use of, specific network facilities and the obligation of equal treatment, the NRA issued a decision addressed to the incumbent, mandating a withdrawal of the provisions that pre-conditioned the conclusion of contracts and further provision of services from its reference interconnection offer (RIO) and reference leased lines offer by bank guarantees. The fourth investigation, examining the compliance with the obligation of price control on the market for call termination on individual public telephone networks provided at a fixed location, led the NRA to issue an interim decision, requiring the incumbent to implement cost-oriented prices as calculated by the NRA. The final inspection carried out by the NRA examined the compliance of the incumbent with the obligation of equal treatment and transparency on the wholesale broadband access market. As a result, the regulator issued a decision, obliging the incumbent to ensure the same functionality of the IP/MPLS (multiprotocol label switching that provides traffic isolation and differentiation without substantial overhead) network as it had provided to its retail unit, in order to enable an alternative offering of retail virtual private network (VPN) business services, and include these services in the RBO. The incumbent

appealed to the Court against all the above decisions of the NRA, and the ruling was still pending at the time this report was being drafted.

The NRA furthermore imposed two fines for non-compliance with imposed SMP obligations, the first relating to the incumbent's failure to comply with price control and cost accounting obligations, concerning the renting of virtual channels for stand-alone broadband Internet access (naked DSL), while the second related to non-compliance with the obligation of equal treatment concerning the functionality of modems in the provision of bitstream access. The incumbent, in each case fined €29 210, appealed to the Court, and pending the appeal the regulator's decisions cannot be enforced at the moment. The new amendment of the ECA will significantly increase penalties as from 2010.

The NRA handled six dispute resolution cases between operators until September 2009. The first case, regarding an operator's non-compliance with users' rights authorising a termination of the existing contracts, was dismissed after a month. The second case, concerning the renewal of bank guarantees required by the incumbent, was transferred to the supervision division of the NRA after one month and a half. The third (on a copper line malfunction), the fourth (on ISDN interference with VDSL), the fifth (on mobile termination rates for international calls), which most likely will be resolved in a supervision procedure, and the sixth case (on ISDN interference with VDSL), were still pending at the time this report was being drafted.

Operators are concerned that APEK cannot enforce its decisions on time, as was the case of the naked DSL pricing, where the NRA mandated a decrease in prices as from December 2008, whereas the incumbent only decreased prices as from August 2009.

APEK, in October 2009, launched a consultation on a recommendation in order to improve transparency to end-users on the speed and quality of service of a broadband connection. The results are expected early in 2010.

Moreover, in addition to two pending cases from 2008 concerning wholesale bitstream access, the NCA started investigations on its own initiative in five cases in 2009. Three investigations (two on the local loop unbundling and one on voice origination and termination), which started in February and April 2009 respectively, were related to the incumbent operator's behaviour, while two investigations, which started in March 2009, involved the mobile market leader's alleged predatory pricing and/or margin squeeze for voice and data services. In October 2009, the Administrative Court dismissed a 2007 decision of the NCA concerning findings on the incumbent's abuse of a dominant position with regard to the provision of a dial-up Internet access coupled with ISDN, and requested the authority to renew its analysis.

MARKET AND REGULATORY DEVELOPMENTS

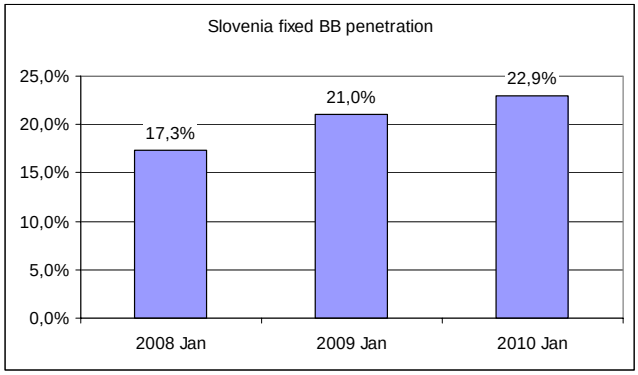
A total of €277 million was invested in the electronic communications sector in Slovenia in 2008 (which was 13.1% more than in 2007). Both alternative operators and mobile operators invested more than in 2007, 14.0% and 44.3% more, respectively, whereas the incumbent's investment dropped by 8.6%. The share of the sector's investment in GDP stood at 0.7%, while the investment over revenues ratio stood at 22.5%, which is above the EU average of 14.0%, and the third best performance in the EU. Revenue in the electronic communications sector in 2008 totalled €1 232 million, which was 11.9% more than in 2007, with both the fixed and mobile market registering growth, by 24.4% and 12.8% respectively. The share of

the electronic communications sector revenue in GDP was 3.3%, which is above the EU average of 2.8%.

Triple play offers were the most significant type of contracts selected by end users in 2009. Mobile operators have started offering bundles, with prices highly competitive to those of fixed operators, while some operators already have started limiting traffic (monthly download capacity caps having been introduced for heavy consumers).

Broadband

Market situation



Fixed broadband penetration increased and stood at 22.9% (465 353 connections) in January 2010, just below the EU average marker. The increase of the fixed broadband (1.9 percentage points in a year) was less dynamic than the EU average growth. Despite growing alternatives such as fibre, with a 14.7% market share, DSL, with a 62.2% market share, remains the predominant technology. The number of fully unbundled local loop lines grew to 56 349 (a strong 13% increase compared to a year ago), whereas the number of shared access lines decreased for the first time since the introduction of this facility, to 20 320 (which represents a 13% decrease as opposed to a year ago). On the other hand, the number of FTTH connections grew to some 68 442 by 54% since January 2009, to a certain extent thanks to alternative operators' retail prices, which are as much as 20% lower than the incumbent's prices. Migration from cable to fibre is also gaining momentum. The incumbent controlled 46.1% of the market in January 2010, a decrease of 3.1 percentage points since January 2009, while the market share of the closest competitor increased with the same intensity to 19.4%[253].

Fixed broadband speeds remain feeble, with merely 36.1% of all connections exceeding speeds of 2 Mbps, the EU average in January 2010 being 83.8%. The operators, however, indicated that only speeds of Internet access, and not of the entire capacity of a bundle of services, are being reported for statistical purposes. However, Slovenia performs relatively better (17.6% of all fixed connections) as opposed to the EU average (23.2%) in relation to speeds exceeding 10 Mbps, which is to a large extent due to FTTH.

Mobile broadband penetration via dedicated data services facilities (3.2%) remains below the EU average of 5.2%, with some 61 414 cards, modems or keys being used by the end users in January 2010.

The largest cable operator launched services based on DOCSIS 3.0 in November 2009, allowing speeds of 50 Mbps and over. The same operator also provides broadband services in rural areas using the multichannel multipoint distribution system (MMDS) wireless technology in the 2.4 GHz band, but the uptake remains low.

253 APEK data for July 2009

Competition in rural areas and periphery is predominantly driven by the initiatives of a few municipalities, which have decided to roll out broadband with state-aid support. So far, €45 million have been spent on various municipal projects, and the Ministry of Higher Education, Science and Technology is currently reconsidering its rural broadband strategy, with a view to strengthening the robustness of projects involving EU structural support, while this will inevitably delay the implementation of projects late into 2010.

Regulatory issues

Average monthly total cost per full unbundling and shared access have remained stable compared to 2008, and stood at €9.57 (below the EU average) and €4.81 (above the EU average), respectively.

No new regulatory development, with direct implications for market players, has taken place in 2009. Based on the results of the second round of market analyses, notified and re-notified to the Commission services in September and November 2009, respectively, APEK proposed to maintain the regulation of the market for wholesale physical network infrastructure access and the market for wholesale broadband access, but failed to adopt final measures, initially envisaged for the end of 2009.

As regards the wholesale market for physical network infrastructure access, APEK defined the market as comprising traditional copper-based infrastructure as well as the new high-speed fibre network. It argued that since the uptake of already rolled-out fibre broadband remains low, the mandated wholesale access would only open up possibilities for an additional increase of revenues, and not lead to a loss, resulting from unused capacities. Against the evidence of a growing inter and intra-platform competition in urban areas, the regulator decided not to apply geographical segmentation of the market, and intends to impose a full set of obligations, including price control, and access to local loops, sub-loops and optical loops, access to dark fibres, wavelength, collocation and remote collocation, and access to the incumbent's equipment with alternative operators optical cables. Service level agreements (SLA), key performance indexes (KPI), and further improvements in provision of access to a detailed network topology and common information relay systems for all operators on an equal basis, should also increase the transparency of the incumbent's operations, once the decision is adopted. Asymmetric access obligations in relation to in-house fibre wiring are foreseen, and the proposed regulated price for unbundled optical fibre, which exceeds the price of the fully unbundled copper line (€8.33), is €11.88.

As regards the wholesale broadband access market, the NRA, once the decision is adopted, will mandate access to all services in case of bitstream (analogue or voice over IP (VoIP) fixed telephony service, distribution of TV signals including Internet protocol TV (IPTV) and video on demand (VoD), building of virtual private networks (VPN), usage of MPLS protocol), including naked DSL. This obligation will come with retail-minus margins in the range of 33% to 88%, depending on the level of interconnection and speed, the margins on average still lower than those in the currently applicable regulation.

On the other hand, the effective implementation of the current remedies remains dwarfed by a large number of disputes resulting from loosely defined obligations stemming from the incumbent's reference unbundling offer (RUO) and RBO. In October 2009, the Administrative Court of Ljubljana rejected several appeals by the incumbent related to the obligations imposed by the NRA, and ordered the payment of a fine amounting to €20 865.

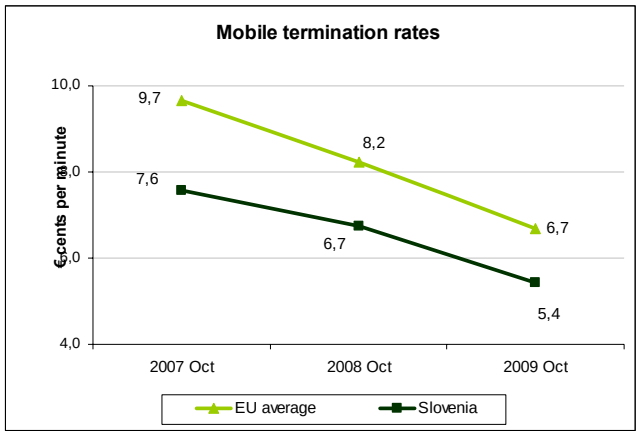
Operators are also concerned about the undefined conditions for migration towards the fibre-to-the curb (FTTC).

Mobile

Market situation

The market share of the incumbent's mobile retail arm dropped to 57.2% in July 2009, from 62% a year ago, and the share of post-paid subscriptions was 67.8%. Mobile penetration, which finally exceeded the 100% mark and stood at 102.2%, was still significantly short of the EU average, which stood at 121.9%. Price per minute of mobile communications, without VAT, was 14 eurocents, which is slightly above the EU average of 13 eurocents. The average annual revenue per user in 2008 was €294, which is €18 more than a year ago and below the EU average for 2008, which stood at €323. Calls from the mobile networks represent more than 50% of all outgoing calls since 2008. Slovenian operators are becoming more and more net payers in relation to cross-border traffic flows. In addition, fierce competition and low prices led to further decreases in operators' revenues, leaving investment prospects for 2010 rather gloomy. A further consequence of aggressive pricing policies (e.g. flat rates for bundles which go as low as €15/month, and calls as low as 8 €-cents/minute, including free on-net calls and SMSs), might in the mid term be that resellers will quit the market, as they are in no position to compete below the voice wholesale price that they pay to the hosting operator (7.85 €-cents/minute). Operators at the same time argue that the insistent reductions in retail prices (of bundles in particular) simply follow retail pricing policies of fixed operators which are undermining the market with inexpensive DSL and fibre offers.

Regulatory issues



In April 2009, APEK adopted a provisional measure relating to the wholesale mobile call termination market. APEK set a price of 5.23 €-cents, applicable to the two largest operators, which is, according to APEK, being protective of smaller operators' wholesale revenues, neutralised a drastic increase in asymmetry between larger and smaller operators. In August 2009, APEK completed a full review of the wholesale mobile call termination market, and upheld the termination rates (asymmetry 1:1.5 in favour of the two smaller operators) based on the provisional measure. It proposed a five-year glide path for the two smaller operators to align with the prices of the two market leaders. The Commission, however, expressed concerns that APEK, while decreasing the overall level of termination rates, is allowing the largest operator to charge significantly above its own reported costs, which could give it an unfair commercial advantage over its competitors. The Commission has asked the regulator to bring rates down to an efficient level as soon as possible, and revise its underlying cost model sooner than envisaged. APEK nevertheless maintained its initial proposal, which according to some operators could distort competition and negatively affect further investments.

In June 2009, the Commission endorsed APEK's plan to require Slovenia's largest mobile operator to continue to provide its competitors with access to its network at regulated prices, since the wholesale market for access and call origination on mobile networks, unlike in most other EU countries, still is not effectively competitive. Competitors, for the time being, would still rely on the SMP operator's network, benefiting from its full national coverage and a range of competitive services. Once they have rolled out their own networks, and they no longer rely on the SMP operator's network, regulation should be withdrawn in principle.

The Administrative Court rejected, in April and in June 2009, several pending appeals of various operators, regarding decisions made by the regulator. The Court thus sided with APEK in the case of an SMP decision regarding the market leader's obligations in relation to call termination, and in the case of a dispute over call origination and the price of national roaming, involving the incumbent's mobile arm and a smaller operator. The Court also dismissed the alternative operator's request for a renewal of the procedure regarding the assignment of the extended GSM (e-GSM) spectrum to the appellant's competitor. In a different case, the Court rejected the request of another smaller operator seeking the regulator's annulment of a provisional measure relating to the wholesale market for voice call termination on individual mobile networks. In another case, concerning the assignment of the fourth UMTS licence to an alternative operator, in October 2009, the Administrative Court upheld the claims of an MNO, where the regulator formerly dismissed the operator's claims regarding the alleged irregularities in the procedure, recognising that the NRA failed to publish the call in line with the principles of transparency requiring a publication on the website of the regulator in addition to the publication in the Official Gazette of the Republic of Slovenia.

Several operators complained about the market leader's anticompetitive practice on the retail market. The incumbent's mobile arm allegedly charges termination prices above the level of retail prices it charges for its on-net calls. Moreover, the operators protested about the unfair conditions for the participation of smaller operators during the tender organised for its services by the Government in the first half of 2009. The alternative operators maintained that not only were the conditions discriminatory, but the market leader also provided large discounts, including free handsets, rendering competition in the business segment practically implausible. Two alternative operators requested the NCA to investigate the market leader's alleged margin squeeze and/or predatory pricing policies. The NCA started proceedings in March 2009 and the findings were still pending at the time this report was being drafted.

APEK has not taken yet its stand in relation to a new entrant's non-compliance with its rollout obligations based on a decision and commitments stemming from the award of a 2007 UMTS licence.

Roaming Regulation

All Slovenian mobile operators complied duly and on time with the European Regulation (EC) No 544/2009 of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services. In most cases the retail prices were set at or very close to the maximum level indicated by the Regulation.

Fixed

Market situation

In July 2009, according to the NRA, the overall PSTN market share, measured as a number of connections, was 37.9%, down from 46.6% a year ago. In the same period VoIP increased from 20.2% to 33.7%, while the market share of the incumbent in VoIP was 44%, down by 2.5 percentage points since July 2008. The number of VoIP connections exceeded 300 000 in the second quarter of 2009, and it is expected that the IP traffic will surpass the analogue circuit-switched transmission of voice in 2010. The overall market share of the incumbent decreased to 81.1%[254] in July 2009 (86.7% at the end of 2008), which is 8 percentage points less than a year ago, suggesting that the advent of an IP based telephony introduced a prospect for competition not only on the international call markets but also on the market for national calls. For example, one traditionally carrier pre-selection (CPS) and carrier selection (CS) based service provider now supplies VoIP services to all major cable operators. The share of subscribers using alternative operators for direct access was 18.9% in July 2009, which is 8.2 percentage points more than a year ago.

Regulatory issues

Following an investigation, APEK concluded in April 2009 that the incumbent failed to comply with the obligations in its RIO. APEK, in its decision, obliged the incumbent not to cancel the existing contracts prematurely, not to cancel already provided services on a temporary basis, not to reject new orders for connections and not to impose new conditions on alternative operators such as the need to present bank guarantees.

Low level of termination rates and the asymmetry calculated by APEK, continue to favour alternative operators for the third consecutive year. However, market conditions remain uncertain, as formal disputes between the incumbent and two alternative operators concerning the level of interconnection rates for IP traffic, resolved via mediation, not yet have provided the necessary technical solution, allowing identification of IP based traffic between the operators.

In the absence of service level agreements (SLAs), based on the incumbent's RIO, guaranteeing the same quality of service as that provided to the incumbent's retail unit, one larger alternative operator brought its fixed operations to an end, focusing merely on the more competitive mobile sector.

Broadcasting

Market situation

Growth of IPTV was strong in 2009 and until July 2009 21.6% of all households had TV connections based on the Internet protocol (DSL or fibre), while the number of cable TV connections decreased to 36.9% (9.5 percentage points less than in July 2008), and the share of terrestrial TV connections decreased to 34.5% (9 percentage points less than in July 2008).

254 NRA data

Even though Slovenia officially announced the switch-off of analogue transmission by the end of 2010, the national advertising campaign promoting the digital switch-off plan started only in December 2009. In parallel, general testing of equipment has been provided for at a national level, the results being published at the end of 2009. Also as of December 2009, consumers are being informed, via an extensive advertising campaign, that they would need to purchase DVB-T receivers or set-top boxes. Without these the viewing of digitally transmitted content over terrestrial networks would not be possible as from January 2011 for some 200 000 Slovenian households. The Ministry of Higher Education, Science and Technology will monitor the degree of public awareness in relation to the ongoing switch-off process.

Regulatory issues

The second multiplexer operator, which was awarded a licence in December 2008, has not yet started with the commercial transmission of terrestrial digital television. The reason why the operator is lagging behind in its network roll-out commitments (70% of population should have been covered by 1 September 2009), is due to difficult and protracted negotiations with broadcasters regarding the price of access. With a view to speed up the switch-over, and to reduce the cost of digital terrestrial television (DTT) network services, the Government, in November 2009, proposed to provide subsidies to broadcasters having to broadcast in analogue and digital techniques simultaneously, amounting to the cost actually occurred as a result of simulcasting. Thus, broadcasting commenced with simulcast in December 2009.

In June 2009, APEK published a call to award additional digital TV broadcasting licences, which resulted in one new DTT licence.

Horizontal regulation

Spectrum management

The two WiMAX operators (one of which is the fixed incumbent), which hold licences in 3.4-3.6 GHz band since 2007, brought their investments to a halt already in 2008. The stated key reasons for this were low transmission speeds not allowing the uptake of bundled services, and a high level of competition stemming from mobile and fibre networks. Against this background, the latest regulator's attempt (in September 2009) to award new licences was reported as a failure, since no operator was willing to pay more than a symbolic price for these individual rights. No frequency re-farming plans have been announced at the time this report was being drafted.

In June 2009, APEK granted a trial licence, in line with the amended GSM Directive 2009/114/EC, allowing 3G operations in the 900 MHz frequency band to the third mobile operator.

The Government adopted a new digital TV strategy in February 2009, based primarily on the conclusions of the RRC06 and WRC07 radio conferences on frequency distribution. The strategy provides an action plan and guidelines as to additional allocation of rights of use of frequency spectrum released as a result of the digital dividend for the third and fourth DVB-T multiplexers, two multiplexers of mobile television, and for broadband networks in 800 MHz band, between 2010 and 2012.

No licensing activities have taken place in the 2500-2690 MHz band in the reporting period. The Slovenian spectrum plan, however, envisages future auctions in line with the Commission Decision 2008/477/EC.

Implementation of spectrum decisions

By October 2009, Slovenia notified the implementation of all relevant Commission Decisions on spectrum harmonisation. Moreover, the NRA in November 2009 granted mobile satellite service (MSS) authorisations to both operators selected by the Commission earlier in 2009.

Rights of way and facility sharing

Alternative operators are concerned that it takes on average six months to obtain permits for construction of new masts, whereas the obtaining of permits to build along highways is nearly impossible. Sharing of masts is provided for in theory, but in practice, with the exception of a few sites, it does not work. Against this background, it remains to be seen how the new Government's amendment of the ECA will improve the implementation record in the area of rights of way.

Numbering

The NRA is perceived as having generally well managed national numbering resources. One case concerning an alternative operator that is obstructed from providing its services on prime numbers (090) to the mobile market leader's customers since 2008, despite several NRA attempts to mediate, remained unsolved, however.

THE CONSUMER INTEREST

Tariff transparency and quality of service

APEK's tariff comparison model for consumers (Komuniciraj.eu), created in 2007, is to be overhauled in 2010, allowing regional comparison of offers in a more user friendly way. APEK has also issued a recommendation on the prevention of bill shocks, requiring operators to adopt best practices in order to avoid users having to face bill shocks, and a recommendation on broadband speeds, requiring operators to adjust actual transmission speeds to the ones advertised and provided for in the contracts.

In July 2009, APEK launched a price tool that would help MNO's to calculate their MTR levels, based on LRIC bottom up or top down cost models.

Universal service

In June 2009, APEK published a call for a selection of universal service (US) providers. Until now only the fixed incumbent was obliged to provide new telephone connections, telephone booths and assistance for users under non-market conditions. While the public tender was open for all operators that wished to provide universal service for the period of the next five years, no operators submitted bids for the entire scope of the US. Therefore, in September 2009, the Slovenian telecoms regulator again designated the incumbent as the provider of access at a fixed location and public pay phones, whereas another market player (the incumbent's directory arm), based on the results of a tender, was designated to provide directory enquiry services and directories (including the services for disabled users).

Users' access to the Internet and network management

While no political debate on net freedoms has taken place between the Slovenian authorities and the industry in the reporting period, operators and service providers, in practice, already dealt with issues of traffic prioritisation and speed limits.

Number portability

Slovenia registered 77 284 fixed number porting transactions and 49 830 mobile number porting transactions in the first nine months of 2009, a 138% increase compared to previous year. For both fixed and mobile numbers, the average porting time is three days, which is below the EU average, and the wholesale price to port a number is €5.

Consumer complaints and out-of-court dispute resolution

The consumer protection authority registered some 2 000 complaints in 2009, mainly dealing with rights and obligations stemming from the contracts (e.g. contract price increase, termination of contracts). Based on consumer protection law and electronic communications law, the authority usually provides advice to consumers within five working days. Another organisation, an NGO, Zveza Potrošnikov Slovenije (ZVP), also represents the interests and rights of consumers in the area of electronic communications.

In July 2009, the incumbent operator, after having informed its existing subscribers in writing, introduced new IPTV content packages, but at the same time increased the subscription fees. Customers who had chosen not to opt for any of the newly proposed packages were by default given a new standard package with a higher monthly subscription rate. This raised a number of questions on whether the customers could have withdrawn from the existing contracts without having to pay any compensation. Both the Consumer protection office and the Market Inspectorate suggested that the incumbent's practice represented a breach of the Consumer protection law, whereas the regulator, after having launched the supervisory procedure, identifying the irregularities, instructed the incumbent to notify the affected end users about their contractual rights. The Commission services are closely following the issue.

In the light of the events following a decline in retail price, the market inspectorate of the Ministry of the Economy (at the time responsible for the area of electronic communications) launched an investigation against a reseller for breach of good business practice. Allegedly, the market player attempted to deceive consumers regarding the price level of a one minute call. The outcome of the investigation is still pending at the time this report was being drafted.

In the first three quarters of 2009 the NRA dealt with 243 requests related to dispute resolution for end users, which is similar to 2008. Disputes primarily concerned issues with billing, contract conditions and the quality of service. In 127 cases the procedure of dispute resolution was initiated, a large number among them resolved in mediation. While 11 cases resulted in a positive decision for the end users, in three cases the consumers were exonerated from the payment of operators' claims, in amounts of up to €28 000.

European emergency number 112

The emergency number 112 is reachable from the networks of all operators (including VoIP) that provide publicly available telephone services (PATS). Also, in the event where domestic mobile subscribers are out of coverage of their home network, the users may call 112 by using

another available domestic mobile network (i.e. national emergency roaming). However, it is not possible to call 112 from mobile handsets without SIM cards. As of July 2009, the ratio of unsuccessful calls was considerably low (1.2 %), while the average response time for 112 calls was 8.9 seconds, with a relatively high percentage of calls answered within 20 seconds (97.5 %). Public safety answering point (PSAP) call handlers can take also calls in English, Italian (in the border region with Italy) and Hungarian (in the border region with Hungary), but there exists no option to have recourse to an interpretation service. Slovenia plans to establish a help centre for people with hearing disabilities. Caller location information using the "push" method is provided by four fixed and five mobile operators, whereas at least four larger operators still provide information by using the "pull" method.

Harmonised numbers for harmonised services of social value (116)

Numbers 116000 and 116111 have not been assigned yet in Slovenia. However, the number 116123, assigned in 2008, has started to become operational in June 2009.

Data protection

A comprehensive legal framework against spam is in place. Slovenia has established an informal cooperation mechanism with other Member States to fight international spam. Malware is limited to certain individual cases, and some 50 cases of malware are reported to state attorneys each year. Information on malware is provided by the consumer protection authority.

The NRA was active in a number of areas regarding the e-safety of consumers. Projects such as Safe.si regarding the protection of children against abusive actions to which they might be exposed via the Internet or mobile phone, Web eye (Spletno oko, with respect to anonymous reports about child pornography and abusive speech on the Internet), and SMS clubs (regarding unsolicited SMS) have been the main focus of the NRA.

SPAIN

INTRODUCTION

Spanish consumers are increasingly choosing bundled services and switching service providers using number portability. Whilst fixed broadband penetration is growing more slowly than the EU average, Spanish consumers are increasingly using mobile broadband services. The switch-off of the analogue television services will take place in April 2010. Operators are concerned about excessive fiscal burden, which was increased this year following the imposition of a new charge for the financing of the public national broadcaster.

During 2009, the Spanish Government has taken a number of initiatives on issues that affect the electronic communications sector. The Comisión del Mercado de las Telecomunicaciones (CMT) has finalised the second round of market reviews. As regards new regulatory obligations, some have already been detailed (such as the reference offer for access to the incumbent's infrastructure), though some others still need to be implemented (such as the new bitstream service).The new regulatory approach of establishing specific discussion fora has been received very positively by all operators. In order to enhance consumer protection, the Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información (SETSI) adopted a single legislative instrument comprising existing and some new users' rights, such as a two-day period for number portability. New draft legislation includes 1 Mbps Internet access services into the scope of universal service, and addresses issues such as digital dividend, spectrum refarming and the reduction of administrative charges.

REGULATORY ENVIRONMENT

Main regulatory developments

The CMT has been active as regards the revision of relevant markets in the past year, and it has adopted final measures for all the markets in the Commission Recommendation on relevant markets as part of its second round of market analyses. The CMT has not yet reviewed the obligations imposed four years ago on the mobile access market. According to the CMT, this market will be revised by mid-2010.

Retail regulation has been significantly reduced (first in the fixed retail calls markets and more recently in the retail leased lines market) and the CMT withdrew also regulation in the trunk leased lines market, except for ten undersea routes, and in the fixed transit services market. Two of the main developments in 2009 were the adoption of a reference offer for the provision of access to physical infrastructure and a new glide-path for mobile termination rates (MTRs).

The Spanish Government decided to impose a charge of 0.9% of gross revenues, excluding wholesale revenues on certain operators as part of the new financing system for the national public radio and television broadcaster (RTVE). The Commission services are looking into this issue, in particular as to its compatibility with the relevant provisions of the Authorisation Directive and the rules for state aid.

New legislation has been proposed by the Spanish Government[255] addressing some electronic communications issues such as the definition of 1 Mbps as functional access to Internet as part of the universal service as of 2011, the reduction of the number of members of the CMT Board, a decrease of administrative charges and the use of the digital dividend for advanced electronic communications services. A draft law on audiovisual services is expected to be adopted shortly.

The infringement proceeding for incorrect transposition and implementation of parts of the Universal Service Directive is still pending, although important developments took place during the year, which seem to address the issues at stake. The Commission is following up this issue.

Organisation of the NRA

The division of regulatory functions between different national regulatory authorities persists, even though the main responsibilities are divided between two of them i.e. the CMT and the SETSI, which is at the moment concurrently responsible for electronic communications policy within the Ministerio de Industria, Turismo y Comercio.

The Spanish Government has not yet taken any decision as regards the appointments of the President and some members of the Board of the CMT, whilst its mandate expired at the end of 2008, but it has proposed a reduction on the number of Board members of several national regulators, including the CMT, from nine to five.

The CMT requested assignment of audiovisual competences, although the Spanish Government has proposed in the draft General Audiovisual Law the establishment of a separate body, the Consejo Estatal de Medios Audiovisuales.

It has been proposed an adjustment of the administrative charges paid by electronic communications operators to the CMT from 1.25‰ to 1.00‰, which is currently in the legislative process.

Decision-making

During 2009, the CMT has concluded all market analyses, with the exception of the mobile access market. Operators have pointed to the fact that the CMT has differentiated remedies in some markets and that prices are often not part of the initial notification leading to further delays in the effective implementation of price obligations. The CMT intends to adapt all regulated prices shortly after the verification of the relevant accounting information. Some operators are also concerned that it might be difficult to comply with certain users' obligations that have been extended by the SETSI to business customers and that the CMT, in the context of market analyses, is not taking sufficiently into account the specificities of the service providers in the business segment.

Comments made by the Commission in the process of notification of the market analyses have not always resulted in modifications to the measures finally implemented in the market. On the one hand, as regards the obligation of access to infrastructure in the context of the physical network infrastructure access market, the CMT adopted a reference offer with detailed prices and conditions, following the Commission's comments that a detailed

[255] Anteproyecto de Ley de Economía Sostenible

reference offer and price obligations should be developed. On the other hand, the CMT adopted a new glide-path for MTRs for the period 2009-2012, where the fourth mobile network operator (MNO) will still benefit from asymmetric rates, although the Commission invited the regulator to revise the methodology and the margin given to the fourth MNO and to reflect that in the glide-path. This would facilitate future compliance with the Commission Recommendation on termination rates, which provides a period of transition until the end of 2012.

A quicker process for implementing the obligations imposed in the context of market analyses and the necessary revision of reference offers and the margin-squeeze test are also considered to be a priority. As regards the margin squeeze test, whilst alternative operators are concerned about the high Net Present Value (NPV) applied in the test, the incumbent operator criticises the methodology for being too rigid.

All operators seem to favour the regulator's new approach of establishing specific fora for discussion of future regulatory approaches, for example for the definition of a new bitstream service or the migration of LLU systems. The regulator's involvement is requested by operators in order to resolve some issues were a common position does not emerge.

Alternative operators are requesting the use of sanctions by the CMT as a deterrent for some alleged breaches of regulatory obligations by the incumbent as well as a more limited usage of the confidentiality principle. In this regard, in 2009 the regulator imposed two fines on the incumbent (€1 million and €11 million) for delaying the implementation of the 'naked ADSL' bitstream service. Moreover, the regulator has adopted a standard procedure for payment of penalties, which is applicable to all reference offers in cases of breaches of provision or repair deadlines. The incumbent has appealed this decision to the national courts, although it has not been suspended.

Dispute resolutions continue to take on average much longer than four months, which is the period established in the Framework Directive. The 11 dispute resolutions that were resolved by the CMT during 2009 have taken an average of seven months to resolve, which is an improvement compared to the one year average in 2008.

MARKET AND REGULATORY DEVELOPMENTS

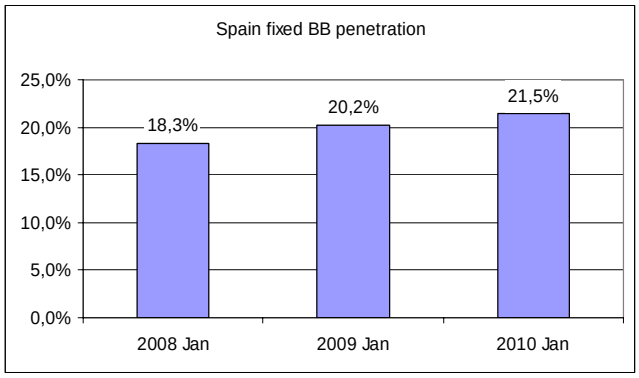
The high ratio for total revenue over gross domestic product (GDP) for the Spanish electronic communications sector shows the importance of this sector for the economy. Total turnover for the sector remained stable at €44.2 billion in 2008. Investment in the Spanish electronic communications market has slightly decreased (€5 172 million in 2008 compared to €5 755 million in 2007), representing an investment to revenue ratio of 11.7%.

In Spain the trend towards bundled services continues to be very significant: 19.2% of the population had subscribed to a bundled offer, with most of them subscribing to a double play offer.

There are several projects of publicly financed networks by local authorities in Spain, most of them based on WiFi technology and a limited number based on fibre. The CMT is monitoring these projects from different aspects, such as structural separation regarding the granting of rights of way, general authorisation and conditions to avoid distorting competition, and it imposes conditions on the projects as necessary. In June 2009, the CMT launched a public consultation on the regulatory approach to public WiFi networks, and is currently preparing guidelines on the subject.

Broadband

Market situation



The number of fixed broadband lines continued to grow but at a slower pace and fixed broadband penetration increased from 20.2% in January 2009 to 21.5% in January 2010, which is below the EU average (24.8%). The use of mobile data services continues to grow and reached a datacard penetration 3.8% in January 2010. Operators are requesting an active policy to stimulate demand for broadband services, as the growth is limited by a relatively low computer penetration in Spain.

Most broadband residential customers in Spain subscribe to broadband services as part of a bundled offer. The majority of broadband connections in Spain (69.9%) are between 2 Mbps and 10 Mbps and almost one out of five is above 10 Mbps. With four out of five fixed broadband lines DSL continues to be the main technology for the provision of fixed broadband services, followed by cable. Market shares have remained more or less constant: alternative DSL operators held 25.6% of the retail broadband market and cable operators 18.9% as of January 2010. In the last year, the incumbent's market share continued to decrease slightly, contrary to the trends in previous years. In October 2009, the incumbent announced a delay of two years on its fibre investment plans and a move towards VDSL2 broadband services provided from the local exchanges.

With more than two million unbundled loops, LLU is the option preferred by alternative DSL operators, followed by bitstream access and few resale lines. In the last year, the number of fully unbundled lines have more than doubled from 835 831 in January 2009 to 1 706 127 in January 2010. This is partly due to the fact that a large number of shared access lines have been migrated to a new unbundling option (called 'naked shared access'), where the alternative operator, by paying a fee equivalent to the fully unbundled fee, can still provide broadband and VoIP services after the cancellation of the incumbent's fixed telephony services by the subscriber.

Regulatory issues

In January 2009, the CMT adopted final measures in the markets for physical network infrastructure access and wholesale broadband access. As regards the market for physical network infrastructure access, the CMT maintained existing LLU obligations, imposed an access obligation to the incumbent's passive infrastructure; and included the provision of dark fibre in cases where access to infrastructure is not technically or physically feasible. The measures also contained a detailed information obligation and conditions for the closure of local exchanges, in order to ensure the transition to next generation access (NGA) networks.

As regards the market for wholesale broadband access, the CMT imposed an obligation on the incumbent to provide a single bitstream service with an Ethernet interface replacing the existing ATM and IP bitstream, for the provision of speeds up to 30 Mbps in the whole national territory. A group consisting of the regulator, the incumbent and alternative operators

is currently discussing the definition of this new bitstream service, which is perceived as an essential wholesale service for the maintenance of competition in the market. As this remedy would still take some time to be fully implemented, alternative operators are requesting in the meantime an update of the existing bitstream services. The CMT has fined the incumbent with €12 million for delaying one year the implementation of the 'naked ADSL' bitstream service, which was considered a very serious infringement.

In February 2009, the CMT adopted final measures on symmetric obligations on operators regarding in-building fibre infrastructure, which provides for the imposition of obligations on operators for facility sharing according to certain criteria. Under the proposed measures, the first operator to reach a building with its fibre network, regardless of its significant market power condition, should meet reasonable access requests by third parties, at reasonable prices and under transparent conditions.

In September 2009, the CMT further reduced by an average of 26% the wholesale broadband access prices, both the national and the regional bitstream services, which currently provide speeds up to 30 Mbps. The regulator significantly reduced the monthly fee for shared access (from €3 to €2.06), though due to the relatively high connection fees the monthly average total cost for shared access continued to be higher than the EU average (€4.04 compared to €3.53 EU average)[256]. On the other hand, the monthly average total cost for fully unbundled loops is just below the EU average (€9.47 compared to €9.75 EU average).

In November 2009, the CMT revised the ducts reference offer previously submitted by the incumbent in the context of the infrastructure access obligation at cost-oriented prices and on non-discriminatory and transparent conditions, which was imposed on the incumbent in the context of the market for physical network infrastructure access and is now limited to urban areas only. This measure follows the Commission's comments about the need to develop a detailed reference offer and price obligations. It also includes access to dark fibre, which is considered by the CMT a last resort remedy and, as such, it does not contain detailed prices and other conditions. In the meantime, the implementation of this remedy has proven to be smooth. Alternative operators are of the view that this is a positive measure, but it has been used mainly for the connection of mobile base stations and in some cases for fibre connections to business customers.

The overall implementation of LLU obligations has now improved and alternative operators are starting to have some visibility as regards the incumbent's installation of remote nodes. The incumbent should inform the CMT and alternative operators six months in advance of any new installation of remote nodes between the local exchange and end-users in case LLU deployment may be affected and should provide, as a compensatory measure to collocated operators affected by reduced availability of unbundling, an indirect access service at a discount of 23.5% for ATM bitstream and 40.6% for IP bitstream, although alternative operators can only offer more limited services based on bitstream. In November 2009, the CMT authorised the installation of 17 out of the first 24 nodes requested by the incumbent following the imposition of the transparency obligation.

[256] According to the CMT, Spanish operators do not always purchase some of the elements, which are taken into account for the calculation of the connection fees.

Mobile

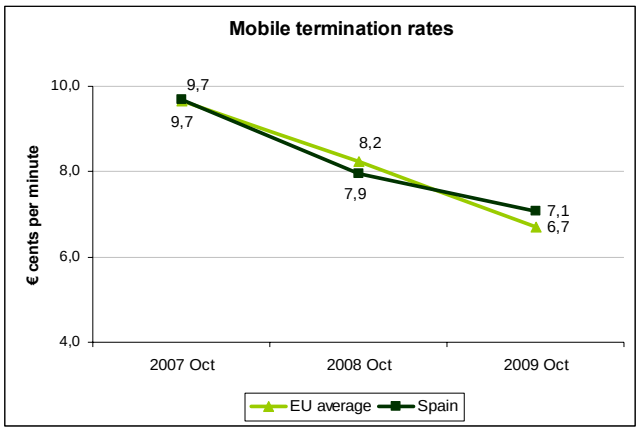
Market situation

The mobile penetration rate in Spain reached 117.6% as of October 2009, which is below the EU average (121.9%). In October 2009, the market shares in terms of subscribers of the incumbent's subsidiary (44.4%) and its main competitor (30.9%) were more or less stable, whilst the third MNO has lost some market share in favour of the fourth MNO and mobile virtual network operators (MVNOs).

In 2008, the average price per minute for voice traffic on mobile networks was €0.17, which is above the EU average (€0.13), and annual average revenue per user (€381) was higher than the EU average (€323). Mobile number portability continues to be used intensively in Spain and there were 3.27 million portabily transactions in Spain between January and September 2009, which is the second highest figure in the EU.

Regulatory issues

The MTRs of the four MNOs and nine 'full' MVNOs have decreased according to the established glide path (7.08 €-cents on average) and are now above the EU average (6.70 €-cents). Following a decision by the CMT in December 2008, mobile operators are now charging a single per-second billed tariff for MTRs.



In July 2009, the CMT adopted the final measure on the mobile termination market establishing an asymmetric glide path that will reduce MTRs from 10.42 €-cents/7.00 €-cents to 4.98 €-cents/4.00 €-cents in October 2011. The regulator is currently developing a LRIC bottom-up model, which should be applied as from 2012 in accordance with the Commission Recommendation on mobile termination rates. In its final measures, the CMT extended the glide-path for six more months compared to the draft measures and maintained the asymmetry on the fourth MNO.

The mobile access market is the only market that the CMT has not yet reviewed. Following the access obligations imposed by the regulator on the three MNOs present in 2006, 16 MVNOs were currently providing mobile services in Spain in July 2009 compared to four operators two years earlier. Some MVNOs have raised concerns about the difficulties to compete due to the existing access conditions, which were agreed on a commercial basis, although only a few operators requested further regulatory intervention. The appeals to the national courts, which were lodged by the MNOs against the regulator's finding of joint dominance, were rejected in 2009 confirming the CMT's decision.

In June 2009, the SETSI launched a public consultation on the opening of a new numbering range for mobile communications, which was positively supported by the sector due to the increase in recent years of mobile broadband services and other types of mobile communications.

Roaming Regulation

Following the adoption of the amendments of the Roaming Regulation in July 2009, the nominal price for domestic SMS charged by the main mobile operators is above the regulated price for roaming SMS, whilst the average revenue per domestic SMS is €0.111. Some consumer associations have reported this issue to the national competition authority. In addition, operators have adapted their voice tariffs for roaming calls made within the EU in order to charge a set-up fee equivalent to the first 30 seconds instead of a complete minute.

Fixed

Market situation

The decline of the fixed market has intensified during 2009. The incumbent remained dominant in the fixed telephony retail market with a more or less stable market share in terms of revenues (75.5% compared to the 63.3% EU average in December 2008). The market share of VoIP is still marginal although increasing at 3.7% as of December 2008. In contrast, as regards numbers of subscribers, by July 2009 27.4% of subscribers were using a provider for direct access other than the incumbent (compared to an EU average of 24.1%), one of the highest proportions in the EU. In Spain, 19.2% of the population had subscribed to a bundled offer as of July 2009, with most offers including fixed voice services, which is becoming a commodity.

Regulatory issues

Retail regulation was reduced significantly: the regulator withdrew obligations on the fixed retail calls markets after finding that these markets are competitive and on the transit service market as well as some of the obligations in the fixed retail access market. The Commission invited the CMT to reconsider the withdrawal of the ex-ante transparency obligation for customised offers and the price control for the set-up fee. The maximum increases for monthly fees for fixed access are still regulated by the CMT, which decided in July 2009 to maintain the fees of the previous year (€13.97). The incumbent may launch temporary offers for discounted monthly fees but only at national level, as no geographic differentiation of offers was finally allowed in the final measures adopted by the CMT.

As regards the fixed wholesale call origination and termination markets, in 2008 the CMT broadened the scope of regulation by including IP interconnection, while it maintained the previously established asymmetry of 30% between the incumbent's and other operators' termination prices. The CMT has started to review the Reference Interconnection Offer, which is necessary as the current reference offer was adopted five years ago. Fixed termination rates charged by the incumbent for time-based interconnection continue to be slightly above the EU average for all types of interconnection services. However, alternative operators use capacity-based interconnection, which is offered by the incumbent since 2001, in order to provide about 70% of their interconnection traffic and provides significant price reductions.

The introduction of wholesale line rental (WLR) as a remedy in the fixed wholesale call origination market, which allows alternative operators to provide their customers with a single bill, is mainly used in the business segment and for residential customers in areas where LLU is not available. Operators may take further interest in this wholesale offer, given that the combination of WLR and bitstream services is now provided at a discounted price.

In July 2009, the CMT adopted final measures on the trunk leased lines market where it decided to regulate ten undersea routes where there is no competition and withdraw the rest of the existing obligations. The Commission is still expecting the notification of the price remedies by the regulator. The CMT has also decided to withdraw retail obligations in the retail leased lines market as from February 2010.

In July 2009, the CMT also adopted final measures on the wholesale termination leased lines market, which improve conditions by increasing the distance of the circuits, including Gigabit Ethernet and allowing the use of leased lines for connection of mobile base stations. A decision on the revision of the regulated prices is expected in 2010.

Broadcasting

Market situation

Terrestrial television continues to be the main broadcasting platform in Spain. The number of IPTV subscribers in Spain has continued to increase, although the market share is still marginal (4.3% of households). The majority of cable and IPTV subscribers are benefiting from an offer bundled with additional services, such as fixed telephony or access to Internet.

In November 2009, the fixed incumbent increased its presence in the pay TV broadcasting market by acquiring 21% of the only satellite TV service provider in Spain, which has almost two million customers (11.6% of households) and many exclusive contracts for premium content.

Regulatory issues

In April 2009, the CMT reviewed the broadcasting transmission market and adopted final measures including the obligation to provide cost-oriented prices and the publication of a reference offer on the owner of the only terrestrial broadcasting transmission network with national coverage. The reference offer was published in October 2009, and some local undertakings have signed agreements.

The date for the switch-off of analogue TV in Spain is 3 April 2010. Although there have been delays in some of the regional milestones established in the staggered timetable, the process is ongoing and 6.5 million of Spanish citizens were switched off from analogue TV by the end of 2009. New legislation adopted in July 2009 establishes that digital terrestrial television (DTT) broadcasters should provide their free-to-air channels to at least one satellite operator, in order to cover areas without DTT signals (2% of population approximately).

Some stakeholders claim that they have not been properly consulted and legal uncertainty was generated by some controversial decisions during the last year, in particular the new financing of RTVE, the modification of DTT licenses allowing the provision of pay TV services[257] and the draft General Audiovisual Law.

In 2009, the national competition authority fined the incumbent broadcasting transmission operator €22.7 million for abusing a dominant position (in particular, for requesting very long contracts, imposing high penalties for cancelling contracts and offering discounts for national

[257] Real Decreto-Ley 11/2009, de 13 de agosto.

coverage, therefore foreclosing the market for possible competitors) and determined that broadcasters have the right to finalise contracts in advance.

Horizontal regulation

Spectrum management

In January 2009, the SETSI published the summary of the contributions received during the public consultation on the future use of frequencies in the 2.6 GHz band and the amendment of licences for 900 MHz, 1800 MHz and 3.5 GHz. However, no concrete decision has yet been taken regarding these issues and operators are demanding more information in relation to spectrum policy.

The SETSI was expected to launch a tender for the assignment of frequencies in the 2.6 GHz band by mid-2010. However, several mobile stakeholders have expressed the view that spectrum refarming should be given priority compared to the 2.6 GHz tender.

Spectrum refarming is still a rather contentious issue, as spectrum in the relevant bands is unequally distributed (16 MHz, 12 MHz and 6 MHz respectively for the three main MNOs) and new operators, such as the fourth MNO and cable operators, are also interested in obtaining frequencies. The incumbent's mobile arm's licence for rights of use of part of the spectrum has recently been extended for five additional years.

The Spanish authorities have recently announced that the upper part of the UHF band (790-862 MHz) will be freed up and made available for advanced communication services by January 2015. National legislation is in the process of being adopted in order to establish the procedure, and it seems that an auction will be organised to help finance the migration by the national DTT channels, which are currently using that band. A decision on the assignment of frequencies for mobile broadcasting services is still pending since the allocation of a single multiplex in 2005 for these types of services.

Although national legislation allows transfer of spectrum rights of use, in May 2008 Spain adopted a regulation on radio spectrum management specifying the conditions for spectrum trading. The SETSI considers the experience so far on the use of spectrum trading successful, although it only applies to very limited frequency bands. It has recently been proposed to extend the scope of that regulation to the main frequency bands for mobile services.

Implementation of spectrum decisions

The Commission services has requested that Spain provide further information as to the implementation of six Commission Decisions[258] adopted under the Radio Spectrum Decision[259] for the harmonisation of spectrum use in specific bands. The SETSI is currently revising the national frequency allocation plan (known CNAF) in order to incorporate some Commission Decisions. The Commission services are currently analysing the information provided by Spain.

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258 Commission Decisions 2008/294/EC, 2008/411/EC, 2008/432/EC, 2008/477/EC, 2008/671/EC and 2008/673/EC.

259 Decision 676/2002/EC

Rights of way and facility sharing

During 2009, there have been two important decisions related to facility sharing, the publication of the incumbent's reference offer for access to infrastructure at cost-oriented prices and on non-discriminatory and transparent conditions following the obligation imposed by the CMT in 2008, and the symmetric obligations on operators regarding in-building fibre infrastructure for access at reasonable prices and under transparent conditions adopted in February 2009. Moreover, the advisory committee known as CADIAU has prepared two draft pieces of legislation with the aim of facilitating network deployment, one on ICT rules inside buildings for NGAs and another one deployment in parallel to works on roads and railways in the public domain.

Operators are still encountering difficulties in obtaining rights of way because of burdensome procedures, delays or even dismantling of mobile antennae in some regions and municipalities. Operators need to deal with more than 8 000 local authorities and the situation is very diverse. The SETSI points out that a significant number of mobile antennae were installed during the last year. However, operators are generally concerned about difficulties in network deployment, in particular as it may affect their capacity to offer mobile broadband services.

As regards the fee equivalent to 1.5% of gross revenue on mobile operators for the use of installed facilities in the public domain charged by an increasing number of local authorities, the national courts ruled in 2009 that mobile operators can be required to pay such a fee but only in relation to the use made of the public domain. The question of what should be the proportionate amount to be paid by mobile operators is still to be clarified.

Administrative charges

The Spanish Government decided to impose a charge on operators as part of the new financing system for the national public radio and television broadcaster (RTVE). The new legislation entered into force in September 2009 through an accelerated procedure. Broadband, mobile and fixed operators, which provide services that may include advertisement in more than one region, are subject to a charge of 0.9% of gross revenues, excluding wholesale revenues. In addition, operators providing pay TV services (such as the main cable operator and IPTV providers) are subject to an additional charge of 1.5% as providers of audiovisual services and free-to-air TV broadcasters to a charge of 3%. The Commission services are looking into this issue, in particular as to its compatibility with the relevant provisions of the Authorisation Directive and the rules for state aid. The CMT is now examining which operators should pay the charge, whilst operators are concerned about the high fiscal burden imposed on the electronic communications sector.

THE CONSUMER INTEREST

Tariff transparency and quality of service

In August 2009, new national legislation for users' rights entered into force in Spain: the "Charter of rights of users of telecommunications services", which provides for a single document comprising existing and some additional users´ rights in the electronic communications sector. Some of the main changes introduced are the provision by operators of more detailed contracts, a more efficient procedure for complaints, a two-day deadline to implement the consumers' request for service cancellation, and specific rights for users of

prepaid services. The promotion for the adoption of a European Charter of users' rights is one of the objectives of the Spanish Presidency.

Following the legislation adopted in February 2008 on data premium services (SMS and MMS), a code of conduct on the provision of these services has entered into force in November 2009[260]. The code of conduct provides for reinforced users' information and the right to be disconnected from these. A separate code of conduct was adopted in June 2009 on premium rate services based on massive calls using the 905 numbering range by TV programmes.

The SETSI publishes quarterly data on quality of service of fixed and mobile telephony services, fixed broadband services and directory enquiry services as well as a comparison table of the retail broadband offers available in the market and the CMT publishes information about the incumbent's offers, as a result of its monitoring of the transparency obligations.

Universal service

As regards affordability of the current universal service, in May 2009 the limit for family income was reduced in order to allow an increased number of citizens to benefit from measures for special needs (known as "abono social")[261]. The Spanish Government has recently proposed to establish 1 Mbps as functional access to Internet as from 2011 within the scope of universal service.

Infringement proceedings are still pending for incorrect implementation and transposition of parts of the Universal Service Directive, although there have been significant developments in the last year. In particular, as regards the transposition issues, in April 2009 a Royal Decree[262] amended the relevant national provisions related to certain requirements for financing of universal service (i.e. the evaluation of an unfair burden by the regulator and the prior request for compensation by the designated operator) and the commencement of a new designation procedure through the launch of a public consultation in September 2009. Following a more open consultation process, a relatively high number of expressions of interest by different potential stakeholders have been received for most of the universal service elements. The SETSI should complete the new designation processes during 2010.

During 2009, the CMT established the net cost for the provision of universal service in the years 2006 at €75.34 million and for 2007 at €71.09 million, a reduced figure compared to previous years due partly to the EU funds that the universal service provider had previously received, and it has established the sharing of the 2006 net cost between operators. The main elements for the net cost are fixed access and measures for special needs. The appeals against the net cost calculation an the CMT´s decision of August 2008, where the CMT established that only mobile operators will contribute to the universal service compensation mechanism for the years 2003-2005, are still pending at the national courts, although the amounts were already paid by April 2009.

In December 2008, following applications by three operators, the incumbent was awarded a tender for the provision of directory enquiry services for a period of three years and it has also

260 Orden ITC/308/2008, de 31 de enero and Resolución SETSI de 8 de julio de 2009.
261 Orden PRE/1231/2009, de 18 de mayo.
262 Real Decreto 329/2009, de 13 de marzo.

been designated for the provision of the remaining universal service elements for a period of two years. As a result and although it seems that retail tariffs for this service have not yet increased, the provision of directory enquiry services will now be provided at zero cost whilst before the same operator was providing it at a cost[263]. The benefits from the provision of some elements (such as directories as from 2006 and payphones) have not been taken into account in the calculation of the universal service net cost although it could have possibly reduced the overall amount, as in accordance with the provisions of the Universal Service Directive the sum of all benefits and costs should be taken into account in the calculation.

Number portability

In the current period of economic crisis, Spanish subscribers have more frequently adapted their tariffs plans and changed service provider while keeping their number. As a result, there were 1.08 million fixed porting transactions and 3.27 million mobile porting transactions between January and September 2009. The use of mobile number portability in Spain entails no cost for the end-user or for the operators while fixed number portability also entails no cost for the end-user although a small wholesale charge is paid between operators.

The average period for porting both fixed and mobile numbers in Spain is five days, which is below the EU average for fixed numbers and above for mobile numbers. The "Charter of rights of users of telecommunications services" has established a reduction of the period for porting fixed and mobile numbers to two days as from the day after the reception of the request, and it already provides for a possible further reduction to a one-day period. In October 2009, the CMT started the procedure for adapting the portability rules accordingly.

In April 2009, the CMT allowed the subscribers' verbal consent to be accepted for portability, which will be later on verified by an independent third party[264]. By February 2009, there would be a change from a distributed to a centralised system for mobile number portability[265] and the sharing of the costs would be clarified.

Consumer complaints

The number of complaints in the electronic communications market continues to increase, and these issues constitute 80% of the cases dealt with by the arbitration centres, which do not always apply the same criteria for resolving the cases. The office established within the SETSI to deal with users' complaints and to provide information on their rights received an average of 835 queries and 98 complaints a day in the first half of 2009; most complaints (81.3%) were resolved in favour of the user. The number of complaints related to mobile services has increased and billing continues to be the most problematic area for fixed and mobile services, whilst users increasingly complained about problems in cancelling contracts for access to Internet services[266]. On the other hand, the number of complaints on areas such as provision of universal service, premium rate services and mobile coverage has decreased.

The poor level of operators´ customer service provided through call centres was the main concern expressed by consumers' associations, who also raised the issue of lack of notification

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263 €16.61 million in 2003, €10.06 million in 2004, €6.87 million in 2005, €3.27 million in 2006 and €3.00 in 2007.

264 Circular 1/2009, resolución de la CMT de 16 de abril de 2009.

265 Circular 3/2009, resolución de la CMT de 3 de julio de 2009.

266 SETSI's report on queries and complaints, first semester 2009.

of contract changes and the difficulty in cancelling contracts of electronic communications services. Some of these issues have been addressed in the "Charter of rights of users of telecommunications services". A better coordination between all the different bodies dealing with complaints in the area of electronic communications at national, regional and local level was also requested by the consumers' associations.

European emergency number 112

Spain has a system with a network of 17 centralised Public Safety Answering Points (PSAPs) at regional level in addition to two PSAPs in Ceuta and Melilla, as responses to 112 calls are a matter of regional competence. In five 112 centres, caller location is not available for users of international roaming services. The Commission services are looking into this issue.

Whilst 65% of the Spanish population know 112 as a number to call in case of emergency in Spain, only 23% are aware that this emergency number can be called from other Member States[267].

Harmonised numbers for harmonised services of social value (116)

In January 2010, Spain has assigned the first number in the 116 numbering range, the number 116111 for children helplines, although it is not yet operational[268].

Must Carry

Must-carry obligations were traditionally imposed on cable operators for specific analogue TV channels and only until the end of the switch-over process in April 2010. In July 2009, national DTT broadcasters have been obliged to provide the free-to-air channels to at least one satellite operator in order to cover the areas that are not reached by the DTT signal[269].

e-Privacy

The Commission services have received several communications from citizens who experienced problems with SMS for direct marketing. According to a recent national survey[270], the majority of Spanish citizens are concerned about data protection and the use of their personal information, 70% had received a call or SMS for direct marketing from an undertaking to which they are not aware of having provided their personal data and 83% had received unsolicited e-mails.

The national data protection authority, Agencia española de protección de datos, which is responsible for issues related to personal data protection including the resolution of consumers' complaints, issued some recommendations in 2008 in this regard and participated in the introduction of a Robinson list in June 2009, which is a list for people who opt not to receive direct marketing communications.

The law that transposed the Data Retention Directive into Spanish national law[271] foresaw the establishment of a register of mobile prepaid customers. In November 2009, prepaid

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267 Eurobarometer Flash survey on the European emergency number 112 (February 2010).
268 Resolución de la SETSI de 12 de enero de 2010. BOE 26 de enero de 2010.
269 Ley 7/2009, de 3 de julio, de medidas urgentes en materia de telecomunicaciones.
270 Barómetro CIS Septiembre 2009.
271 Ley 25/2007, de 18 de octubre.

customers that had not been registered were temporarily disconnected, although they can still be connected back in case they register by May 2010.

SWEDEN

INTRODUCTION

Despite the economic downturn, the sector performed well and ultra-speed broadband connections, allowing the use of advanced Internet services, continued to grow rapidly in particular, while fibre is expected to replace cable as the most important fixed alternative platform as soon as in 2010. Moreover, more and more consumers are widely embracing the concepts of Internet mobility, e-safety, number portability and migration to voice communications over Internet protocol. Sweden was the first in the world to have launched the new mobile generation, long-term-evolution, network.

On the other hand, the effective implementation of the current remedies is delayed by a number of disputes, appeals and Court decisions resulting inter alia from vaguely defined obligations in the incumbent's reference offers. The finalisation of the second round of market reviews was well on track, with an important mobile market review still outstanding. Frequency management and e-safety appeared high on the agenda of the Post- och telestyrelsen (PTS), the Swedish telecoms regulator (NRA). Continuous dismantling of copper networks in outermost regions has further prompted the Swedish authorities to reassess the provision of universal service.

REGULATORY ENVIRONMENT

Main regulatory developments

In November 2009, the Government published its broadband strategy, stressing the importance of high-speed Internet for the development of growth in the economy, competitiveness, innovation and for the development of a sustainable society. One of the concrete proposals by the Government is the promotion of investments in sparsely populated areas. The strategy recognises, amongst others, the importance of cooperation with local levels of administration, a coordination process during road-works, the streamlining of planning and building acts, an increase of the availability of ducts and the use of spectrum. According to the strategy, the Swedish telecom operators should provide broadband access with a speed of at least 100 Mbps to 40% and 90% of all households and businesses by 2015 and by 2020, respectively. Legislative amendments, which would in part implement the strategy, are expected for 2010.

In August 2009, the Government introduced an amendment to the competition law, which aims to prevent the state, municipalities or regional governments from engaging in commercial activities in a way that harms competition. The new legal provisions come as a response to numerous complaints received by the national competition authority (NCA) about conflicts caused by public actors competing with private ones. The law came into force on 1 January 2010.

In June 2009, the Government adopted an amendment of the electronic communications act (ECA), with entry into force in July 2009, which proposed to align the law with the Framework Directive, enabling all market players to appeal decisions of the NRA. This allowed the Commission, in September 2009, to close the infringement proceedings, which were started in October 2006, concerning the incorrect implementation of provisions of the

regulatory framework on the right to appeal. Another infringement is still pending regarding dispute settlement.

Organisation of the NRA

In the autumn of 2009, a new director general of PTS was appointed for a period of six years, the mandate starting in January 2010.

The jurisdiction of PTS to settle disputes, regarding terms and conditions of interconnection agreements which are the subject of negotiations between undertakings, remains limited in scope, and is the subject of a pending infringement proceeding launched in 2008. The Ministry of Enterprise, Energy and Communications was working on draft law proposals, with a view to align the relevant ECA provisions with the regulatory framework by July 2010.

The NCA, with its staff of three or four permanent people working on electronic communications issues, is not perceived as very active in the sector. With the exception of cooperation during the processes of market analysis, only one decision has been taken in the last 10 years, and the decision is still pending in Court.

Decision-making

The NRA notified five markets following market analyses in 2009, and final decisions have been issued as regards call origination and termination on individual public telephone networks provided at a fixed location, access to the public telephone network at a fixed location and terrestrial broadcasting TV transmission markets. It remains to be seen whether these new decisions, which are more detailed than the first round decisions, will provide less room for diverging Court interpretations and operators' appeals. As a result of growing competition, PTS proposed to deregulate the market for transit services in the fixed public telephone network and to withdraw the existing significant market power (SMP) obligations. However, certain call conveyance services that were previously included by PTS in the transit market, i.e. bundled transit, are now considered to be part of either the call origination or the call termination markets, and therefore continue to be subject to ex-ante regulation in those markets.

More generally, PTS produced an analysis of the situation within the field of electronic communications relating to infrastructure-based competition in the access networks, proposing the Government to review the statutory provisions concerning functional separation, thus extending the concept of the regulation to include fibre-based access networks.

In November 2009, the NRA issued an update to its calculation model for interconnection, shared access and full local loop unbundling, for 2010. Under the new model, interconnection fees are lowered by approximately 15%, while access fees for shared access are lowered by 25%.

MARKET AND REGULATORY DEVELOPMENTS

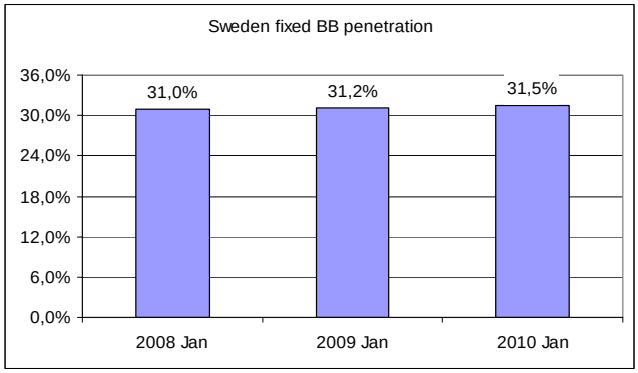
Revenues in the electronic communications sector in 2008 equalled to €5.97 billion, a decrease of 3.0% since 2007. The fixed market, which generated €1.72 billion, registered a decline of 15.2% compared to 2007, whereas the mobile market, with €2.13 billion, registered an increase in revenues, up by 21.7% since 2007. The share of the electronic communications

sector revenue in GDP was 1.8%, which is below the EU average of 2.8%. With €1.01 billion in 2008, the sector invested 9.4% less than a year ago. The incumbent invested €354 million, which is more than in 2007, while mobile operators and fixed alternative operators invested €165 million and €347 million, respectively. The share of investment per GDP stood at 0.3% in 2008, while the investment over revenues ratio stood at 16.9%, which is above the EU average of 14.0%.

In the second half of 2009, just over eight per cent of all mobile telephony, fixed telephony, broadband and digital television subscriptions were bundled with other subscriptions, but the share of bundled packages keeps growing. Some 4.8% of the population availed themselves of double-play and 3.2% availed themselves of triple-play offers by July 2009. The most common form of bundling is a combination of broadband and fixed telephony, followed by fixed telephony, television and broadband.

Broadband

Market situation



Fixed broadband penetration increased to 31.5% (2 916 401 connections) in January 2010, the fourth highest in the EU. However, the annual increase of fixed broadband lines (0.3 percentage points in a year) was lower than the EU average growth for the second consecutive year.

Despite a strong growth of alternative access platforms, DSL remains a leading fixed technology, with a market share of 58.5% in January 2010. While the number of fully unbundled local loop lines grew to 202 917 (5.7% increase compared to a year ago), the number of shared access lines (389 061) and resale (74 022) decreased by 4.6% and a notable 35.6% respectively, revealing that consumers are benefiting from the regulation as alternative operators are moving up the investment ladder. On the other hand, there is no effective take-up of bitstream access. While the incumbent's broadband market share decreased by a tiny 0.5 percentage points since January 2009 (being 38.8% in January 2010), its DSL market share increased for the second year in a row to 61.0% in January 2010. Growth of fibre (621 000 lines in January 2010) remained solid, with 16.5%, as compared to the growth of cable (577 070 lines in January 2010), with 3.8%. With this trend, it is expected that fibre will replace cable as the most important fixed alternative platform as early as in 2010.

However, prospects for the rollout of fibre are not clear, provided that the average revenue per user (ARPU) declined to its lowest, SEK 250/month (€ 24/month), in years. The share of publicly-owned fibre-based infrastructure, i.e. the infrastructure owned by the Government or municipal enterprises, is approximately 45% of the fibre market in Sweden, which corresponds to the share of optical fibre of the incumbent operator.

Both the average monthly total cost per full unbundling and shared access increased compared to 2008, and stood at €9.53 (below the EU average) and €5.31 (above the EU average), respectively.

More than 1.2 million of fixed broadband lines had speeds of over 10 Mbps (33.0% of all lines, which is the sixth best performance in the EU). 65.8% of fixed broadband connections were higher than 2 Mbps, a speed that allows end-users to use advanced Internet services such as live streaming, video-on-demand (VoD), online gaming and high-definition television (HDTV). Growth of mobile broadband connections measured as dedicated data service/cars/modems/keys was strong and stood at 11.9% in January 2010, which was the fourth highest in the EU, the EU average being 5.2%.

Against the background of a static DSL market, alternative operators announced considerable investment reductions in DSL based networks, shifting focus towards alternative platforms, such as mobile 4G long-term-evolution (LTE) networks. Wholesale provision of fibre by the incumbent is in practice limited to the major cities, whereas the incumbent's retail nationwide fibre-based solutions are provided to large business customers and real estate owners, and at the same time only to a limited extent provided at a wholesale level.

Regulatory issues

There was still no effective bitstream offer at the time this report was being drafted, despite the Commissions' comments and a ruling of the Administrative Court in 2008, mandating the incumbent to comply with the imposed obligation. The incumbent's voluntary commitments, in force since March 2009, have not improved the access conditions for competitors either. Equal treatment does not appear to be guaranteed, and in the absence of formal functional separation, the incumbent's retail arm and the alternative operators in practice use different supply channels, information delivery times and cost models for provision of co-location sites, wholesale line rental and bitstream access. Backhaul is not regulated either, since the Swedish Courts ruled that backhaul can not be considered an “associated facility” to local loop unbundling access. Moreover, in November 2009, the Swedish Administrative Court of Appeal overturned the 2008 decisions of the regulator and the County Administrative Court of Appeals, whereby PTS had ordered the incumbent to provide wholesale bitstream access on a non-discriminatory basis, including via fibre connections, and with a functionality allowing IPTV distribution. The Appeals Court, on the grounds that the regulator exceeded its competences, had referred the decision back to PTS for a re-assessment, thus restricting the concept of the NRA's interpretation of a definition of non-discrimination. The Commission services are looking into the matter.

With an ongoing work on the current market analyses, the NRA primarily focused on the future regulation of fibre and backhaul, in the light of the estimated risk of re-monopolisation of fixed markets in the context of NGA development, the incumbent's voluntary commitments and the non-activated functional separation remedy. In November 2009, PTS proposed to revise future SMP obligations on the wholesale markets for physical network infrastructure access and wholesale broadband access, following a second round of consultations. Among the changes, PTS limited the obligation on the incumbent to provide backhaul capacity, and removed the obligation that the incumbent should consider differences in costs when setting the price of bitstream access over fibre-based networks. No obligation imposing access to ducts would be imposed on the SMP operator(s) according to PTS proposal. The adoption, originally foreseen for the end of 2009, has been moved forward until mid 2010.

In spite of a limited take-up of bitstream thus far, PTS, in the second round of public consultations in June 2009, proposed to change its calculation method for the regulated price of bitstream access, whereby the regulator wanted to add an economic margin, set at a certain

percentage above the cost of providing the service, which would allow operators greater incentive to invest in new infrastructure.

In October 2009, an Administrative Court, following an appeal, overturned part of the two dispute resolution decisions by PTS concerning interconnection, prices and co-location for local loop unbundling between the incumbent and two alternative operators. The Court overturned PTS' decision on the price for installation points and installation capacity, and revised the price that the incumbent could charge since January 2007 for shared access from € 42.6 to € 55.1.

In November 2009, the Stockholm County Administrative Court ruled that the NRA was correct in issuing an obligation (which was consequently appealed) to the incumbent concerning the prices it was obliged to charge for local loop unbundling, but nevertheless extended the compliance deadline until December 2009. The incumbent has consequently appealed the ruling of the Court, but is complying with the decision of the regulator. In March 2009, PTS notified the incumbent of the obligation, which had a deadline of April 2009, and the threat of a fine of SEK 30 million (€ 2.88 million) and SEK 2 million (€ 192 000) for each month the measure was not implemented.

A rapid uptake of exclusive contracts between the incumbent and real-estate companies required continuous supervision by the regulator. According to the operators, exclusive deals seek to foreclose competition for the coming 10 years, while at the same time MDFs and copper lines are dismantled, causing alternative operators to put up with an ever shrinking home customer base. PTS, in November 2009, concluded that certain exclusivity and collective connection agreements might limit competition and consumer choice, and recommended that owners of buildings should avoid collective connections, long commitment periods for exclusive access, and entering in agreements giving an operator exclusive distribution rights for broadband services. However, at present, only the NCA could possibly intervene on the basis of applicable law.

Mobile

Market situation

Revenues from the mobile voice services increased significantly since 2007, and the traffic with SMS, MMS and advanced mobile data services grew rapidly. Mobile penetration, with 120.9%, compares with the EU average, which stood at 121.9%. Competition is robust. The market share of the incumbent's retail arm dropped slightly to 42.2% in July 2009, and the share of post-paid subscriptions increased to 59.9% (compared to 56.0% in 2008). Sweden has one of the lowest prices for mobile phone calls in Europe. The price per minute of mobile communications, without VAT, was €0.11, which is below the EU average of €0.13. Also, the average annual revenue per user in 2008 was €271, which is €14 less than a year ago, and below the EU average for 2008, which stood at €323.

In February 2009, the only CDMA2000 450 MHz mobile operator went bankrupt, but in March 2009 an American based industrial group took over the network ensuring the continuity of the operator's commercial operations.

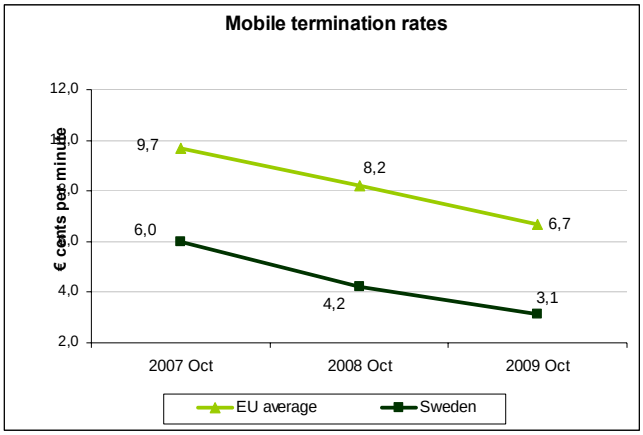
Two MNOs announced their intention to pool the available frequencies of the two companies. This new development would, in principle, lead to operators' trunking efficiencies (i.e. improved efficiency in spectrum usage), but could also lead the two companies to control the

majority of available spectrum in different frequency bands suitable for deployment of LTE. The NCA is looking into the matter. These two network operators announced their plans to start the rollout of high-speed LTE networks in 2010 and 2011.

In December 2009, the market leader commercially launched its LTE network in the 2.6 GHz band. The service is, however, limited to the Stockholm region.

Regulatory issues

In June 2009, PTS decided to impose new symmetric rates for the wholesale termination of voice calls on mobile networks, amounting to 0.32 SEK (3.14 €-cents) per minute for the incumbent and the three alternative network operators. The new rates will be in force until July 2010. PTS is determined to further bring down the MTR levels to SEK 0.2 (2.00 €-cents) per minute by 2012. However, PTS estimates that the level, reflecting a pure LRIC model, could set MTRs as low as SEK 0.1 (1.00 €-cents) per minute.



One of the MNOs appealed the regulator's decision, but still complies with the obligation, on the grounds that PTS allegedly failed to provide a reasonable explanation on how the investment cost of operators, having a market share inferior to that of 25%, could be recuperated given the calculated levels of MTR.

Given that access to mobile networks is not regulated, MVNOs merely provide voice services, which puts them at a competitive disadvantage vis-à-vis MNOs that have adopted practices of bundling data services together with voice. Against this background, several market players expressed a desire to secure rights to use spectrum in the near future on equal conditions. This would, in principle, prevent spectrum hoarding and market re-monopolisation resulting from the digital dividend.

In December 2008, the NCA launched an investigation into the mobile operators' alleged collusive behaviour in the context of the re-assignment of GSM licences, and is currently analysing the operators' observations following the authority's preliminary findings of March 2009, which confirmed the risk of an anticompetitive behaviour. At the time of drafting this report, the investigation was still pending.

Roaming Regulation

All Swedish mobile operators complied duly and on time with the European Regulation (EC) No 544/2009 of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile telephone networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services. In most cases the retail prices were set at or very close to the maximum level indicated by the Regulation.

Fixed

Market situation

The share of voice over IP (VoIP) communications increased from 6.4% in July 2008 to 8.0% in July 2009, and the number of IP-based numbers increased by 18% over a year, reaching 735 000 subscriptions, while the number of traditional narrowband subscriptions fell by 6%. The share of subscribers using alternative operators for national calls stood at 33.0%, which is one percentage point more than a year ago. Overall, the market share of the incumbent increased to 58.0% at the end of 2008, which is two percentage points more than a year ago, reversing the declining trend over several years.

Regulatory issues

In February 2009, further to July 2008 injunctions, PTS announced injunctions against the incumbent regarding the calculation of cost levels in relation to fixed interconnection for 2008 and 2009. While the incumbent appealed the injunctions instructing the operator not exceed the cost levels specified by PTS, the County Administrative Court, in December 2009, upheld the regulator's decision, according to which the costs calculated should be based considering a full application of IP technology.

In March 2009, the incumbent increased retail access prices, which implied that wholesale line rental (WLR) prices, which are based on PSTN retail-minus, consequently increased as well. In November 2009 the incumbent also discontinued the provision of volume discounts for its wholesale clients, thereby obliging the latter to streamline their retail prices for the second time in the year. Keeping up with the incumbent appears to be difficult, as the market leader heavily promotes migration from PSTN to IP (with PSTN prices on a hike) by providing inexpensive triple and quadruple play offers.

Against this background the NRA, in September 2009, introduced changes to the way wholesale telephony access rates are calculated. While previously, a promotional offer by the incumbent would apply only for the purpose of rate calculations during the period it was promoted, it will now be calculated for the duration of the contract on offer.

In October 2009, the NRA rejected a complaint from an alternative operator regarding the cancellation of a contract it had with the incumbent concerning wholesale telephony, arguing that the market leader was in breach of its obligations.

In May 2009, PTS also issued a decision in a dispute between the incumbent and an alternative operator over the rates they can charge for exchanging telephony traffic (fixed termination rates). The regulator rejected the alternative operator's view that it should be allowed to charge higher interconnection rates than the incumbent, as it is a much smaller operator, and imposed symmetric pricing based on the maximum rates imposed on the incumbent according to the LRIC model.

Broadcasting

Market situation

Only one operator continues to provide services on the broadcasting transmission service market for digital terrestrial television (DTTV). Six terrestrial multiplexers (MUX) are in operation. Digital television keeps growing and competition is intense, much thanks to the establishing of the IPTV platform. Although the number of households connected to fibre grew, the market share for IPTV remained at the level of 2008 (7.9% market share). Out of digital terrestrial TV households, one quarter are free-to-air, while three quarters are pay-TV, with the ARPU in a downward trend.

Regulatory issues

Despite growing competition on the broadcasting TV transmission market, PTS in the autumn of 2009, decided to maintain the regulation of the market for the provision of free-to-air digital TV broadcasting, while deregulating the pay-TV market for terrestrial broadcasting transmission. The SMP operator is concerned that the proposed price model (FDC based) would not allow them to recuperate the initial investment.

The radio television authority (RTVV) further reviewed licensing conditions (i.e. agreements) in 2009, which is expected to become the authority's regular annual practice. In particular, the review concerned coverage conditions, quality of transmission parameters referring to either MPEG-2 or MPEG-4 compression standards, technical cooperation parameters and handling of smart cards. The existing conditional access conditions have also been extended for another year, whereas RTVV registered no complaints concerning the conditions in question. The broadcasting licenses are valid until 2014.

Horizontal regulation

Spectrum management

Based on a joint application by all major active MNOs, PTS in March 2009 decided to renew, until 2025, the existing spectrum licences in the 900 MHz frequency band that were due to expire in 2010. PTS also amended the licence terms to ensure technology neutrality (as foreseen in the amended GSM Directive 2009/114/EC), and decided on the redistribution and additional allocation of frequencies, which in part were transferred by trading to the one remaining UMTS-operator lacking frequencies in the 900 MHz band. Although there were other operators that expressed interest for licences in the 900 MHz band, no competitive or comparative selection procedure was deemed necessary according to the regulator. One alternative operator launched a complaint with the Commission, while another appealed against the decision to the Administrative Court. The Commission services are looking into the matter.

Re-farming plans regarding the 800 MHz band (790-862 MHz) are well under way. The band has been vacated from analogue transmissions, since all analogue transmitters were switched off, and digital transmitters in the 800 MHz band are currently under migration to below 790 MHz. The Government reserved 470-790 MHz for terrestrial TV transmission including

HDTV. PTS intends to organise an auction for licences in the 800 MHz band in 2010 under a service and technology neutral regime, enabling provision of broadband services over wireless networks. So far two public hearings and one public consultation have been held. In the consultation document the NRA proposed that national frequency division duplexing (FDD) licenses should be made available for duration of 15 years, while a spectrum cap should be fixed, ensuring that no bidder would be assigned more than 2x20 MHz of spectrum. The regulator is currently developing technical licence conditions i.e. measures to handle interference issues that could affect the quality of broadcasting below 790 MHz as well as other upshots that could have effect on the current users.

PTS has initiated a procedure for a prolongation of licences in the 1800 MHz band. As a first step, the licences, which are due to expire in 2010, will be prolonged to the three existing licence holders in the 1800 MHz band. Due to its specific characteristics, PTS plans to limit 1800 MHz frequency assignments to what is deemed necessary to maintain the operation of the existing GSM services in Sweden, i.e. 2x10 MHz. PTS has received several applications also from other operators, a large number of them claiming that all spectrum should be assigned through a competitive procedure, or at least the current right holders should be excluded from participation. As it now seems over 50 percent (2*40 MHz) of the band will be assigned in such a procedure. In August 2009, PTS approved the transfer of a wireless spectrum licence from one of the operators in the 1800 MHz band.

In September 2009, PTS launched an auction for wireless spectrum in the 3.7 GHz band under a service and technology neutral regime, enabling mobile telephony or broadband. The licences were allocated on a municipal basis, but bidders were allowed to submit combined bids to cover larger areas. One lot of 2x20 MHz was available on a national basis. The single-round, closed-bid auction ended in October 2009 and 2 national licences and 116 licences on municipal basis were assigned to participants.

The regulator has also carried out an auction for the 28 GHz band and initiated a potential re-farming of additional parts of the 450 MHz band, where currently one CDMA operator holds a licence of 2x4.5 MHz band. In addition, the regulator expects that the five 2008 licensees in the 2.6 GHz band, would commence with their roll-out plans in 2010 or 2011 at the latest.

In September 2009 PTS introduced a new spectrum fee calculation model, applicable as of January 2010. The basis for the spectrum fee model is the amount of spectrum held, rather than the number of transmitters. The regulator expects that the model will lead to a more efficient use of spectrum, and would prevent the risk of spectrum hoarding and market re-monopolisation.

Implementation of spectrum decisions

By October 2009, Sweden had notified the implementation of all Commission Decisions on spectrum harmonisation, except for Decision 2008/671/EC on intelligent transport systems (ITS).

THE CONSUMER INTEREST

Tariff transparency and quality of service

In June 2009, PTS, in cooperation with the consumer protection authority (CPO), launched an improved version of the Telepriskollen tariff comparison site. One of the major features of this new version is that consumers are now able to compare different bundled offers. However, promotion campaigns continue to be excluded from comparison.

In October 2009, PTS issued new guidelines to operators, in force since November 2009, which comprise means to improve transparency in tariffs, and changes in contracts for consumers. Telephony operators are required to publish all prices and contract conditions clearly on their websites. In addition, the operators will have to publish commitment periods and contract cancellation notice periods in conjunction with the tariffs. A separate set of guidelines that also apply to Internet operators state that consumers should be notified on the differences between their current contract and an amended version.

Universal service

Currently no operator has an universal service (US) obligation. There is no operating unfair burden recovery mechanism in place, and in principle only public financing is possible. However, the incumbent's declining market share in the fixed telephony, and its noticeable disinvestment in rural areas (i.e. currently some 2 500 households do not benefit from a fixed connection, and in the near future, some 18 000 households could be affected as a result of the incumbent's decision to switch the provision of services from fixed to wireless platforms), compelled the Swedish authorities to reconsider the prospect of operator financing, however, no concrete solution has been proposed at the time this report was being drafted.

Users' access to the Internet and network management

PTS, on commission from the Swedish Government published, in November 2009, a report on the concept of 'open networks and services,' in which it urges a cautious approach to any interventions aimed at safeguarding 'net neutrality' principles, since, according to PTS, excessive regulation to guarantee openness in networks could have unintended consequences, and hamper the willingness to invest by the regulated operators. The regulator acknowledges that there are a number of clear-cut cases where network restrictions can be imposed without infringing on the concept of openness or net neutrality. They relate to managing traffic for resilience and security, combating malware, spyware and spam. The report states that while there may be indications that the need for intervention in the higher network layers - applications and services - may be increasing, most of the problems it has identified can readily be solved by remedies in the lower network layers - those already covered by the sector-specific regulation for the telecoms sector.

Number portability

487 925 mobile numbers were ported from October 2008 till October 2009, which represents an increase of 16% per year, while Sweden registered 195 269 fixed number porting transactions in the first nine months of 2009. The time taken to port the numbers remains particularly long. With maximum 15 days to port fixed numbers (in contrast to 5 days for

mobile numbers), Sweden has the worst record in the EU. The Swedish authorities are working on proposals that aim to shorten the porting time during 2010.

In November 2009, the NRA determined that the incumbent may charge the full price for porting telephone numbers to another operator even if the request concerns a bulk transfer of numbers. The regulator's decision, following a complaint from an alternative operator, was based on the fact that even though the transfer was in bulk, the numbers were scattered across a large number of local exchanges, and that the costs were similar to porting each number individually.

Consumer complaints and out-of-court dispute resolution

The regulator registered a general decrease in the number of complaints in 2009. The complaints mainly concerned mobile Internet issues such as transmission speeds, traffic congestion, coverage in rural areas, while also issues such as the time taken for porting of numbers and excessive lock-ins in relation to fibre connection contracts have been recorded. CPO, on the other hand, dealt with a number of complaints in relation to requests when consumers wished to migrate from IP back to PSTN connections. These untraditional migrations however, are reported to be long-lasting, whereas for comparison, PSTN to IP connection is done within the same day. CPO registered an increase of SMS related issues, such as unsolicited or misleading advertisements that target young population, and ring-tone scams, and complaints with regard to misleading marketing of price and availability of services in the case of TV and broadband.

In the autumn of 2009, PTS issued guidelines imposing stricter requirements on operators, to inform their customers when the contract conditions change. Under the previous rules, operators were obliged to inform customers at least one month in advance of the intended change of a contract. Operators were also obliged to allow their customers to cancel contracts without penalty. Under the new guidelines, publishing such a notice on a website will not be enough, and operators will be required to notify customers using a form of communication relevant to their service, be it an email or SMS.

In November 2009, a ruling in the Market Court, allowing a pay-TV operator to automatically prolong customer contracts unless the end-user notified the operator that the contract should not be extended (the operator must however inform the end-user of the prolonging), the Swedish consumer ombudsman expressed concerns about the consequences of the judgment, as it extends the range of companies allowed to automatically prolong contracts under an exemption in contract law.

The consumers' preferred course of action appears to be via the Courts (at the time this report was being drafted, twelve cases regarding the alleged breaches of marketing and contract terms on the Internet, channelled via the CPO, were pending at the Market Court). In addition, the consumer protection office, based on an out-of-court dispute initiative, issued a prohibition to three mobile phone operators regarding misleading marketing of mobile Internet with speeds up to 7.2 Mbps when it was not possible to reach that speed. The prohibition was coupled with a fine of € 50 000 should the operators not discontinue these marketing activities.

Alternatively, consumers may file a petition to the National Board for Consumer Complaints. The board issues recommendations, which are not binding, however they appear to be

followed by the majority of companies. Another possibility is to complain to the Swedish Consumer Bureau for Telecoms, TV & Internet (KTIB). KTIB provides free information, guidance and assistance to consumers and acts as a mediator between individuals and service providers.

European emergency number 112

The emergency number 112 is reachable from the networks of all operators (including VoIP) which provide publicly available telephone services (PATS). Also, in the event where domestic mobile subscribers are out of coverage of their home network, the users may call 112 by using another available domestic mobile network (i.e. national emergency roaming). It is also possible to call 112 from mobile handsets without SIM cards.

As of July 2009, the average response time for 112 calls was 6.9 seconds, with a relatively high percentage of calls answered within 20 seconds, i.e. 93%. Public safety answering point (PSAP) call handlers can take calls also in English and Finnish (in the border region with Finland), whereas the consumers, in theory, can avail themselves of an interpretation service. The share of non emergency calls is 58 %, including 3% of hoax calls. The main part of non emergency calls are so called "silent calls" or the calls that originate from mobile phones which are either not handled correctly or by technical shortcomings in the telephone system, e.g. while roaming. All telephony service providers are obliged, if technically feasible, to transfer the calling party number to the PSAP.

For fixed (PSTN) telephony the location information is automatically retrieved (automatic pull) from a central address database. For mobile telephony the caller is usually positioned. Caller location information for international roaming calls is not available for calls to 112. In this case the PSAP operator requests a position (manual pull) using a standard procedure. VoIP operators are not required to inform their users in case they do not provide caller location information for 112 calls. Complaints about 112 call handling and answering and the provision of information on 112 are handled by SOS Alarm. The Swedish Civil Contingencies Agency has the responsibility to supervise how SOS Alarm is fulfilling the contract about 112 with the Ministry of Defence.

Harmonised numbers for harmonised services of social value (116)

The number 116123 has been assigned and will be operational during the second quarter of 2010, whereas the number 116111 is in operation since February 2009.

Data protection

Network security is high on the regulator's agenda. In 2009 PTS introduced measures aiming at strengthening the resilience of operators' networks. However, operators are concerned about the level of the administrative burden, which comprises a cost for a "preparedness fee" (with a view to strengthen the resilience of networks), a data protection and data retention compliance costs, and an intellectual property rights enforcement cost. In addition, the surveillance law (FRA), enforced to control cross-border traffic, requires significant CAPEX enabling operators' networks to connect with several surveillance points.

Cooperation between governmental bodies is organised around SAMFI, a collaboration group which supports agencies within the information security field. The group consists of the Swedish Defence Materiel Administration, the National Defence Radio Establishment, the

Swedish Armed Forces, the Swedish Civil Contingencies Agency, the Swedish Police and PTS. PTS offers a website with an interactive education tool on Internet security for end users. The Swedish consumer protection office on the other hand provides advice to consumers about spam and Internet security. The Swedish direct marketing association provides guidelines on its website regarding direct marketing. The interest organisation of financial institutions offers information on banking security on its website.

PTS and the data inspection authority (Datainspektionen) have launched a joint project to examine the way mobile operators supply information about their customers to mobile content providers. In particular, the project aimed at examining whether such transactions infringe the privacy of mobile subscribers. A report with the findings is expected at the time this report was being drafted.

Network security is carried out by PTS. Supervisory work aims at spreading awareness and promotes preventive work and preparedness for the management of interruptions, interference and disruptions on the part of service providers. In 2009, PTS supervised a total of 11 network security disruptions, while a scheduled supervision was targeted towards operators of municipal networks. The main reasons for disruptions are reportedly caused by broken cables (excavating-related damages to cables) and upgrades or installation of new hardware and software.

In May 2009, the Commission decided to refer Sweden to the European Court of Justice for having failed to transpose the 2006 Data Retention Directive, requiring telecom operators to store information about their customers' phone calls and emails.

UNITED KINGDOM

INTRODUCTION

In 2009, the UK electronic communications market was characterised by falling prices for consumers and reduced household spend on communications services. The use of mobile services was on the rise, including the use of mobile Internet. Also fixed broadband penetration was still growing in 2009, although at a much slower rate than in the previous years. While the fixed incumbent operator remained the largest retail operator, its market share continued to decrease as a consequence of the growth in Local Loop Unbundling (LLU) and Wholesale Line Rental (WLR) uptake by alternative operators. In particular, the incumbent's share of retail fixed voice calls by volume of calls fell to under 50% for the first time at the end of 2008. There was one major consolidation of alternative providers in the broadband sector, and, even more importantly, two of the current five UK mobile network operators launched a merger process.

In the regulatory domain the year 2009 was marked by ambitious Government involvement in the telecoms area through the 'Digital Britain' initiative with far-reaching proposals concerning actions such as modernisation of spectrum, commitment to ensure universal broadband availability and promotion of next generation networks. The UK regulator, Ofcom, took a large number of decisions regarding, in particular, market reviews, spectrum management and consumer issues but had also to cope with a strong surge in the numbers of disputes and appeals against its decisions. Market players continued to look to Ofcom to set out the details of the approach to regulation of next generation access (NGA) networks, building on the NGA statement published in March 2009.

REGULATORY ENVIRONMENT

Main regulatory developments

On 16 June 2009, the UK Government published the 'Digital Britain' White Paper outlining plans for the UK to enhance the competitiveness of the economy in the transition from analogue to digital technology. Regarding broadband it announced the UK's ambition to ensure at least 2Mbps for all users by 2012 and to support the roll-out of high speed broadband services with a fund to support investment provided by a new levy on end-users. In the area of frequency policy, the White Paper set out complex arrangements involving spectrum caps and various conditions for re-balancing spectrum holdings above and below 1GHz, between existing and new operators, capable of supporting new broadband services. Following the White Paper, in November 2009 the Government submitted to Parliament a 'Digital Economy Bill', which transposes certain of its proposals into national legislation, in particular measures to tackle digital piracy.

There were a number of developments regarding fixed incumbent's Undertakings in the context of its functional separation which is overseen by Ofcom. In particular, Ofcom reviewed the deadlines for completing the incumbent's systems separation and made several amendments to the Undertakings concerning the roll-out of next generation access networks. The details of regulation in this area are, however, yet to come with the expected new analysis of the wholesale broadband and physical access markets. Following the finally concluded appeal procedures regarding the current mobile termination rates, Ofcom launched a discussion on their future regulation. The second round review of wholesale and retail narrowband markets involved several regulatory statements and consultations, in particular on different remedies on the fixed incumbent.

Further to the inquiry carried out in 2008, the Commission launched in April 2009 an infringement procedure against the UK concerning the transposition into UK law of certain EU requirements regarding confidentiality of communications. In October 2009, this procedure entered into the second stage of Reasoned Opinion.

Organisation of the NRA

While Ofcom remains the independent communications regulator, with statutory powers and autonomy from Government, the 'Digital Britain' initiative marked a more active role for Government in this area. For example, in spectrum policy the Government is proposing for the first time to use its powers of direction in relation to Ofcom.

The 'Digital Economy Bill' proposed to give Ofcom several further functions, including the fight against digital piracy, monitoring the resilience of the telecoms infrastructure and promoting efficient investment in infrastructure. The implications of the latter new duty appeared to raise concerns for some operators who are keen to see Ofcom discharge this new duty in an objective, evidence-based way.

Decision making

The work of Ofcom in 2009 was characterised by a significant increase in both the number of dispute resolution procedures and appeals against its decisions in the Competition Appeal Tribunal (CAT). The latter in particular put a strain on the regulator's resources. Delays in the decision-making were reported in the case of market analysis of leased lines, which created uncertainty for operators using the regulated wholesale products.

As a result of its thorough consultations, Ofcom may need to change its final decisions from the proposals set out in draft measures submitted to consultation. While such flexibility was appreciated by some operators, it was also challenged in the CAT in 2009. In their appeal submitted in July 2009 against Ofcom's decision of May 2009 on LLU remedies the appellants also argued that Ofcom's consultation on this decision was inadequate since it consulted on a range of possible levels for a price control rather than the actual decision that it planned to adopt. In the appellants view, this undermined the ability of respondents to respond to the consultation.

Ofcom's approach to market analysis is to conduct the national and Community consultations in parallel. This means that, in cases where Ofcom reconsults on a modified proposal, it also launches a new Community consultation. The Commission therefore continued to urge Ofcom to systematically carry out the national consultation before the Community consultation in order to avoid unnecessary double notifications.

In two judgments passed in 2008 (the May 2008 judgment on Ofcom's determination of mobile termination rates in the period from 2004 to 2007 and the September 2008 judgment on Ofcom's November 2007 decision on number portability) the CAT addressed also wider issues concerning the way Ofcom works, namely, cost-benefit analysis and dispute resolution procedures. As regards cost-benefit analysis, operators appeared to be more positive than a year ago indicating that Ofcom's performance has improved in this domain. The May 2008 CAT judgment, which obliged Ofcom to use its dispute resolution powers also to modify, where appropriate, its earlier regulatory decisions, was quoted as one of the main drivers for the increase of the number of disputes. In fact, Ofcom's dispute resolution intervention was being used as a more convenient and also a cheaper replacement for CAT appeals against market review decisions, which are both costly and limited in time to two months following the adoption of the Ofcom decision. It was also suggested that the general negative

economical climate was another reason for the significant increase in the number of disputes as operators are pressed financially.

Although Ofcom endeavours to respect the four months deadline under the Framework Directive for resolving disputes, it sometimes extends the inquiry phase, which does not count towards this time limit. Ofcom has not so far revised its existing guidelines on dispute resolution, to reflect the relevant CAT judgment of May 2008. Yet, such a revision would be appreciated by the operators who would be better informed as to the information that should be included in their applications, which in turn would allow Ofcom to deal with disputes more quickly.

The number of appeals against Ofcom decisions to the CAT also increased significantly in 2009 as operators felt that they stood a good chance of winning in the CAT. Furthermore, the consolidation in the market was leading to the formation of larger companies that could afford such appeals.

MARKET AND REGULATORY DEVELOPMENTS

The total turnover of the UK communications sector was about € 50 billion and the total value of tangible investments in electronic communications networks was about € 8.1 billion in 2008. According to estimates from operators, their investments were declining in 2009.

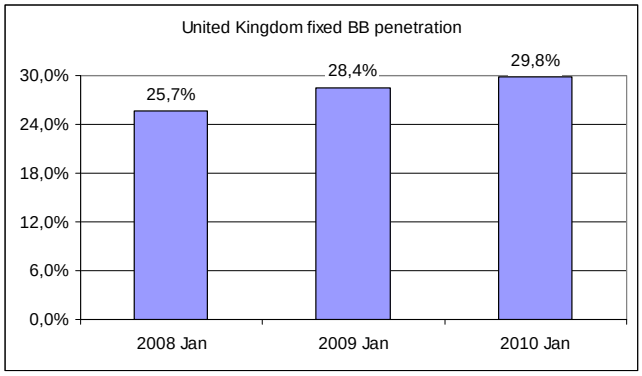
In its third annual evaluation report published in May 2009 Ofcom considered that the fixed incumbent's functional separation, which is implemented through the Undertakings, has had positive effects both for competition and consumers. The main developments in 2009 in this area concerned the incumbent's systems separation and next generation access networks (NGA).

With regard to the former, the original target was for fixed incumbent's network access division's data, applications and hardware to be separated by June 2010. Ofcom postponed the deadline for full physical separation in exchange for the incumbent's commitment to invest in improving some of the wholesale products. Ofcom considered that there were new requirements from operators, which could not have been perceived at the time of the Undertakings, which were higher in priority than some of the other systems developments agreed at the time of the Undertakings. However, some alternative operators considered this to be an unjustified relaxation of the initial Undertakings.

In the area of NGA, further to consultations in 2008, Ofcom issued a Statement in March, which set out the overall regulatory approach to NGA. On the basis of this Statement, in June 2009, Ofcom agreed to a variation of the incumbent's Undertakings concerning FTTC and a consultation was issued on a similar variation for FTTH to allow the fixed incumbent's network access division to install and operate electronic equipment used to provide wholesale active inputs for superfast broadband services.

19.2% of customers subscribed to bundled services in October 2009. Specifically, 11.7% of the population had subscribed to double-play and 7.1% had subscribed to triple-play packages. Bundling is expected to develop further as a result of the withdrawal of retail voice regulation on the fixed incumbent, which was previously prevented from including voice services in bundles.

Broadband



Market situation

The UK broadband market experienced consolidation in 2009 with one LLU provider (Carphone Warehouse) acquiring another LLU provider (Tiscali). As a result, there are now three fixed broadband providers in the UK with a market share above 20%

The UK broadband penetration rate continued to rise to reach 29.8% in January 2010 compared to 28.4% in January 2009 and was higher than the EU average of 24.8% in January 2010. However, for the first time in recent years, this UK growth rate of 1.4 percentage points fell significantly below the EU average growth rate of 2 percentage points and was almost two times lower than the growth rate of 2.7 percentage points reported in the UK in 2008.

LLU continued to progress – the Telecoms Adjudicator (OTA2) reported approximately 6.4 million LLU lines at the end of 2009 compared to 5.5 million LLU lines a year ago. The LLU monthly average cost in October 2009 was € 9.06 for fully unbundled lines and € 2.59 for shared access, which is below the respective EU averages of € 9.75 and € 3.53.

The fixed incumbent's share of the retail non-corporate fixed broadband market increased during 2009 (28.3% in January 2010 compared to 25.4% a year ago) but remains nevertheless one of the lowest market shares for an incumbent in the EU and is considerably below the EU average of 45%. Also the market share of resale of the fixed incumbent's broadband offering fell to reach 12.9% in January 2010 compared to 17% a year ago. Notwithstanding this decrease, the UK still remains the market with the largest resale market share in the EU. In terms of mobile broadband, the estimated UK penetration rate by number of dedicated data services cards/modems/keys stood at 6.7%, which was above the EU average of 5.2% in January 2010.

As of January 2010, the UK had one of the largest shares in the EU (78.4%) of fixed broadband lines offering speeds in the 2 to 10 Mbps range, which is currently the most common bandwidth in the EU representing 60.6% of all fixed broadband lines. The share of low-speed lines below 2Mbps was just 1.8%, which is one of the lowest shares for such lines in the EU where they on average represented 16.2% of all lines in January 2010. Finally, the share of high-speed lines above 10Mbps was reported to be 19.8%, which is below the EU average of 23.2%. According to Ofcom's research into fixed-line broadband speeds, the average broadband speed in April 2009 was 4.1 Mbps, while the average 'up to' headline speed advertised by operators was 7.1 Mbps. This research also unveiled that those living in urban areas received significantly faster speeds than those living in rural areas (4.6Mbps compared to 3.3Mbps).

As regards retail pricing of broadband services, Ofcom estimated the average price for residential broadband delivered over copper lines to be around £13.65 a month (excluding VAT) at the end of 2008, which is almost half the average of £23.30 a month for the same service at the end of 2005 (the difference is even greater if these prices are converted into € according to applicable exchange rates, which give approximately € 14 in 2009 and € 34 in 2005).

The 'Digital Britain' White Paper announced the establishment of a 'universal service commitment' to provide 2 Mbps to all by 2012. This commitment will be delivered by a mix of technologies: DSL, fibre to the street cabinet, wireless and satellite. The planned public funding of £ 200 million (approx. € 225 million at the end of 2009) will come from the resources reserved but not used for assisting end-users in switching to digital TV. The regulatory 'vehicle' for the implementation of the commitment will be the existing Industrial Development Act. The details of the expected service level, such as minimum speeds, would be determined in tender documents on a regional basis. These tender specifications will, accordingly, determine if mobile operators will also be eligible to bid.

In 2008, the fixed incumbent announced a £ 1.5 billion (approx. € 1.7 billion at the end of 2009) investment plan into next generation access networks over a four year period to connect 40% of UK homes and businesses, i.e. some 10 million premises, of which 25% would be covered using FTTH. In 2009, it revealed the first set of locations, where NGA will be deployed from early 2010, to around 2.5 million UK homes and businesses. The fixed incumbent is under competitive pressure from a cable operator, which is upgrading its entire network (which covers 46% of the UK) to DOCSIS 3.0 providing 50Mbps broadband services.

The 'Digital Britain' White Paper also recognised that public support is needed to ensure universal access to high-speed broadband. It concluded that one third of the UK population could remain served only with the current generation broadband unless a specific subsidy scheme is set up. To deliver at least 90% coverage of next generation broadband access for homes and businesses by 2017, the White Paper proposed to create a Next Generation Fund, based on a supplement of 50 pence (approx. € 0.56 at the end of 2009) per month on all fixed line subscriptions, which is expected to raise £150 million - £170 million a year (approx. €169 - € 191 million at the end of 2009). This new levy would be introduced through the UK finance bill, which should be presented in April 2010.

Regulatory issues

Further to the consultation carried out in 2008, Ofcom adopted in May a decision to increase the charges levied by the fixed incumbent's network access division to alternative operators connecting customers using full LLU (the fee for shared access remained the same) for the period between May 2009 and March 2011. This decision has been appealed to the CAT, which made reference to the Competition Commission (CC) to determine the pricing issues.

Following the Statement on NGA in March, the details of NGA regulation are expected to be addressed in the next market analysis of the wholesale broadband and physical access markets in conjunction with Undertakings that the fixed incumbent has given Ofcom under the Enterprise Act 2002. In 2009, the fixed incumbent did not provide regulated duct access or access to dark fibre. Instead, it was trialling a 'Generic Ethernet Access', which allows operators to interconnect at the Ethernet level in exchanges. Indicative prices for the GEA over FTTH had been published as well as a price range for GEA over FTTC. The alternative providers were critical of the fact that, with this product, the fixed incumbent was moving up the value chain leaving less room for value- added services for alternative operators. Although presented as a product based on equivalence of inputs, criticism has also been expressed regarding this aspect of its provision.

Mobile

Market situation

The mobile penetration rate continued to rise in 2009, thanks to the increased number of devices, to reach 126.2% in 2009, which is higher that the EU average rate of 121.9%. Mobile users were optimizing the use of their inclusive tariff packages, which meant that the volumes were actually up as consumers replaced calls from fixed lines with their inclusive mobile calls. The revenue per subscriber was at the same time decreasing as the retail prices per unit were falling – annual average revenue per mobile user went from € 317 (£ 253.6) in 2007 to € 307 (£ 245.7) in 2008, which is below EU average of € 323 in 2008. According to Ofcom, in 2009 the personal use of mobile phones was for the first time more prevalent than use of fixed lines.

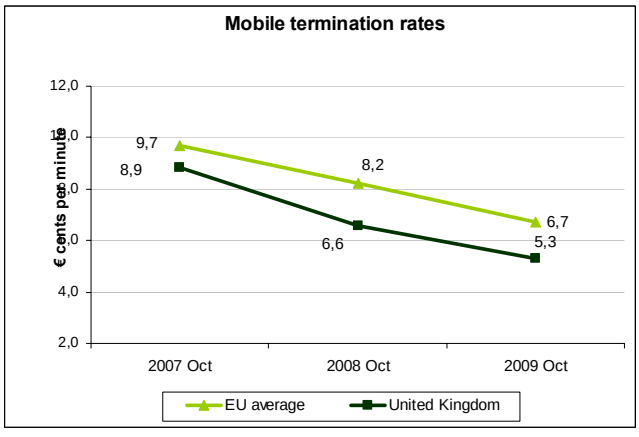
There were some 30 mobile virtual network operators (MVNOs) in the UK with a total 10-15% market share. MNOs introduced a MVNE ('enabler') platform which allows also very small players to become MVNOs at a lower cost through an aggregator.

All five UK MNOs reported progress in mobile broadband. However, with higher usage there is also increasing customer dissatisfaction with the quality of service due to capacity problems. Regarding Mobile TV, there have been limited trials of DVB-H. Some operators launched during 2009 a fixed and mobile product for the small and medium-sized business market, which fuses fixed-line and mobile calls on one number, with one voicemail box.

Following announcements earlier in the year, Deutsche Telekom and France Telecom announced in September 2009 that they would combine T-Mobile UK and Orange UK in a 50:50 joint venture. The new entity's market share will be well ahead of that of the two current mobile market leaders, which had 21% and 20% mobile market share by subscribers in October 2009. The merger is intended to reap considerable cost savings. This reduction from five to four network operators could nevertheless give rise to fears of a lessening of competition, with an adverse effect on the current price competition, which has so far been beneficial for UK consumers (price per minute of mobile voice communication stood at 0.13€ in 2008, which is a significant decrease from €0.17 in 2007 and the same as EU average of €0.13 in 2008). The merger was notified to the Commission under EU merger rules in January 2010.

Regulatory issues

In the course of 2009, the final decisions were reached concerning the current mobile termination rates (MTR) set by Ofcom as from 1 April 2007 to run for four years. Following a process in the CAT and the Competition Commission, which decided on the price control matters, Ofcom modified the MTR glide path to reach a target average charge in 2010/2011 (in 2006/7 prices) for the four established operators of 4.0 pence per minute (down from Ofcom's original



decision of 5.1 ppm) and of 4.3 ppm for the new mobile entrant (down from 5.9 ppm). As of October 2009, the average nominal MTRs had decreased to 5.31 €-cents, one of the lowest levels in the EU and below the EU average of 6.70 €-cents.

In May 2009, Ofcom published a document which assessed six possible options for the future regulation of mobile call termination in the UK as from 2011, ranging from deregulation to "bill and keep" and including also the currently applied cost accounting methodology as well as the methodology proposed in the Commission Recommendation on termination rates. A further consultation on the preferred option is likely to be launched in 2010.

In July 2009, Ofcom issued a second public consultation on the assessment of the mobile sector. Among other issues such as promoting competition, MTRs and reducing the barriers facing new entrants, in this document Ofcom also announced its intention to look more closely into the persistent 'not-spot' problem and to work on facilitating better coverage, including emergency roaming. The 'Consumer Focus' published an extensive report in October criticizing mobile operators, among other things, about insufficient coverage (not spots) and about the variety of tariff options, which reduce price transparency.

In the area of mobile gateways, by judgment of 10 February 2009, the Court of Appeal upheld the appeal by Ofcom against the CAT judgment of August 2006. The Court of Appeal decided that the current licences granted to UK mobile network operators do not cover the use of commercial GSM gateways and that, in the absence of a specific licence or exemption from licensing, the use of commercial GSM gateways is unlawful in the UK. In light of complaints from GSM gateways providers, the Commission services are considering whether there is an issue of compliance of the UK regulatory framework with the Authorisation Directive following the Court of Appeal judgment.

Roaming Regulation

Mobile operators were offering voice and SMS roaming services in the EU at retail prices in compliance with the price caps established by the amended Roaming Regulation, which entered into force on 1 July 2009. According to operators, voice volumes were declining in 2009 while data roaming volumes were going up. The special roaming tariff packages offered by mobile operators were popular with customers. Some of them provided incoming calls for free and standard national rates for calls made, subject to an additional set-up charge per call.

Fixed

Market situation

There was a decline in fixed voice volumes, which could be partly explained by fixed to mobile substitution. According to the Telecoms Adjudicator (OTA2), at the end of 2009 there were 6.03 million Wholesale Line Rental (WLR) lines and the number of telephone numbers using CPS was 3.73 million (compared to 5.32 million WLR lines and 4.16 million telephone numbers using CPS a year ago). The number of CPS enabled lines was declining at a faster rate, partly as a result of increasingly being substituted for the fixe incumbent's end-to-end Wholesale Calls product. On the other hand, the introduction of the WLR3 product was still not complete - about 115 providers were using it at the end of 2009 and 90 more were expected to migrate. On the other hand, the big providers, with the exception of the fixed incumbent's retail division were still using the WLR2 version, which is not fully based on equivalence of inputs.

The fixed incumbent's market share in the fixed telephony market continued to decline to reach 54.7% in December 2008 by retail call revenue (compared to 57.5% in December 2007) and 47.1% by volume of calls (compared to 51.4% a year ago). By both indicators, this is the

lowest market share for an incumbent in the EU. Charges for call termination on the incumbent's fixed network remain the lowest in the EU in the cases of local and single transit and second lowest in the case of double transit. These charges are two to three times lower than the respective EU average termination charges.

Regulatory issues

In the course of 2009 Ofcom performed the second-round review of the retail and wholesale fixed narrowband services markets, which were first reviewed by its predecessor Oftel back in 2003. In its regulatory statement on the wholesale market review published in September 2009 Ofcom concluded that the fixed incumbent as well as the local fixed incumbent in the Hull area retained SMP in the markets for wholesale exchange lines, call origination and call termination in their respective geographical areas while all providers offering fixed geographic call termination retain SMP in call termination on their own networks. In addition, Ofcom concluded that fixed incumbent no longer had SMP in the wholesale market for local tandem conveyance and transit.

The obligations already in place for the fixed incumbent, which is subject to a full set of remedies, and the local fixed incumbent in the Hull area basically remained unchanged. The previously applied lighter regulatory approach was also proposed in the termination of fixed geographic calls on the networks of other fixed operators, requiring operators to provide call termination on fair and reasonable terms. In addition, Ofcom launched a separate consultation on imposing an additional obligation for these alternative operators to publish their termination rates. In its comments on this draft measure in October 2009, the Commission invited Ofcom to impose also an adequate ex ante price control and a non-discrimination obligation. Finally, towards the end of the year Ofcom also re-consulted on modified proposals concerning the market for wholesale transit services proposing to continue to find the fixed incumbent as having SMP in the single transit market and to impose a range of regulatory remedies on it.

By separate decision, Ofcom imposed specific network remedies on the fixed incumbent as from 1 October 2009 to run for four years to 30 September 2013 in relation to the wholesale call origination and call termination services. The cost model applied in this remedy was not consistent with the recommended approach set out in the Commission Recommendation on the regulatory treatment of termination rates, despite the fact that the end date of the new remedies falls nine months after the end date for transition to the Commission's recommended approach (31 December 2012). Ofcom justified this on the basis of the benefits of a four year control and the problems associated with de-linking the regulation of call termination from the broader remedy package. The Commission services will be following closely the implementation of the Commission Recommendation on termination rates.

Finally, by a second separate decision taken in October, Ofcom imposed remedies for WLR and related services on the fixed incumbent by setting a single control for a 'core' WLR. This new WLR product will be priced at the level of the current cheaper residential WLR and also the price for installing new WLR connections was reduced. In December 2009, these remedies were appealed to the CAT and CC.

As regards fixed narrowband retail services, Ofcom found that the market had developed since 2003 in that the fixed incumbent retained SMP in only two of the product markets (ISDN2 and ISDN30). On the other hand, the local fixed incumbent in the Hull area retained SMP in all retail access and calls markets as there had been no significant competitive developments in that area and its existing SMP remedies were consequently continued. The majority of retail telecoms markets were accordingly deregulated allowing the fixed

incumbent to offer discounted bundles of services including traditional fixed-line calls and line rental for the first time. This move followed the first step of deregulation in 2006 when Ofcom removed its price control obligations for retail voice calls.

In February 2009, Ofcom completed the review of retail and wholesale leased lines markets (the Business Connectivity Market Review ("BCMR")) started in 2008. Furthermore, in July following a separate consultation, Ofcom published a Statement on remedies for leased lines supplied by the fixed incumbent, which commenced on 1 October 2009 and will end on 30 September 2012. The previous remedies had already expired at the end of September 2008 but during this intermediary period the fixed incumbent had committed voluntarily not to increase charges. The new charges have been appealed to the CAT, which was requested to refer the price control matters arising in this appeal for consideration by the Competition Commission.

Further to identification of changes in the retail low-bandwidth leased lines market Ofcom proposed in 2009 to relax the pricing restrictions applicable to the fixed incumbent as a result of its SMP in this market, in order to allow bespoke pricing and bundling. The Commission considered in its comments that this finding called for a new analysis of the retail market in general.

Broadcasting

Market situation

According to Ofcom, digital television take-up reached 89.2% of households at the end of Q1 2009 delivered by various digital platforms. It increased by 2.1 percentage points year on year which is less than a year ago. While previously the main driver of the increase was the free-to-view digital terrestrial television (DTT) service, now the contributions of DTT, satellite and cable have evened out. In July 2009, DTT was the leading digital television platform used in 37.1% of households, followed by satellite (35.4%), cable (12.4%), analogue terrestrial (10.2%) and IPTV (0.4%). At the end of March 2009, the number of homes able to access to HD television content rose to around 2.3 million (9%), mostly through satellite or cable as well as IPTV.

The coverage of DTT was reported to be 73% of the population while that of analogue terrestrial television was 99% of the population. Digital switchover, which is planned to be completed in 2012, progressed with Exeter in the West Country becoming the UK's first 'digital city' in May 2009.

Regulatory issues

In response to complaints from competing broadcasters, Ofcom continued to work in 2009 to ensure fair and effective competition in pay TV markets, investigating access to premium TV content. A further consultation was published in June setting out details of a proposed 'wholesale must-offer' obligation containing a range of regulated prices for channels to allow premium content to be made available on other TV platforms, including IPTV and digital terrestrial broadcasting.

Horizontal regulation

Spectrum management

Directive 2009/114/EC of 16 September 2009 amended the GSM Directive of 1987 providing for the introduction in the 900 MHz band of new wireless services, starting with UMTS services. This Directive, which has to be implemented by the Member States until 9 May

2010, also obliges Member States to examine whether the existing assignment of the 900 MHz band to the competing mobile operators in their territory is likely to distort competition in the mobile markets concerned and, where justified and proportionate, to address such distortions in accordance with Article 14 of the Authorisation Directive.

The UK Government's Digital Britain White Paper proposed that the 900 MHz band will stay in the hands of the two MNOs currently holding rights of use for this frequency band and set out a number of measures for rebalancing spectrum holdings. Subsequently, in October 2009 the Government issued a consultation on a Direction to Ofcom to implement the wireless radio spectrum modernisation programme. On the basis of recommendations from the independent spectrum broker, it is proposed to direct Ofcom to conduct a combined auction of the 800MHz digital dividend spectrum and the 2.6GHz spectrum to be completed before end 2010. If it is postponed beyond 2010, then Ofcom should auction separately the 2.6GHz TDD suitable spectrum (a portion of 50MHz), which can be used for WiMAX.

It has been argued that the forthcoming liberalisation of the GSM spectrum for other uses potentially gives competitive advantage to the current holders of the 900MHz band over competitors in deploying mobile broadband. While competitors could use instead the digital dividend frequencies in the 800MHz band (790-862 MHz), which have similar coverage characteristics, in accordance with Ofcom's decision of 30 June 2009 regarding their release, these frequencies will only become available in 2013, i.e. long after liberalization of the 900 MHz spectrum.

The proposed combined auction would be subject to spectrum caps – a sub-1GHZ cap of 2x17.5MHz and a total spectrum cap of 2x65MHz of FDD equivalent spectrum for mobile-suitable spectrum holdings below 3GHz. If the 800MHz spectrum in excess of the sub-1GHz cap is bid for, the current holders must relinquish their 900 MHz spectrum on a 1:1 ratio. Any operator having 2x25MHz or more of liberalised 2G spectrum must also relinquish a block of 2x5MHz of this spectrum into the auction should it acquire any spectrum in the combined auction. All relinquished spectrum will be placed in the auction.

Ofcom published the procedures for the award of spectrum in the 2.6 GHz band (i.e. 2500 – 2690 MHz) as well as in the 2010 – 2025 MHz band already in April 2008 but they were appealed by mobile operators to the CAT as well as to the High Court. The litigation in the High Court was finally closed at the end of 2009 as Ofcom withdrew its decision, which had become superseded by the new Government initiatives. The Commission services are following closely the developments in this area.

Implementation of spectrum decisions

In the course of 2009 the UK notified the implementation of Commission radio spectrum decisions adopted in 2008: 2008/294/EC, 2008/411/EC, Decision 2008/673/EC amending decision 2005/928/EC, Decision 2008/432/EC amending Decision 2006/771/EC and 2008/671/EC. In addition, UK notified the implementation of two further decisions adopted in 2009: Decision 2009/381/EC and Decision 2009/343/EC.

THE CONSUMER INTEREST

Tariff transparency and quality of service

During 2009, Ofcom adopted certain measures to improve tariff transparency for calls to non-geographic numbers in the 087 range, which are used by many UK businesses and public institutions. Revenue sharing between operators and service providers was prohibited for calls to 0870 and communications providers are now required to provide their customers with clear

information about call charges. The use of 0871/2/3 ranges was made subject to more stringent regulation – the remit of premium rate services regulator PhonepayPlus was extended to cover these numbers also. PhonepayPlus will monitor compliance and will also be able to consider user complaints. A further review is nevertheless planned in 2010 on the prices for calls to these numbers (which are at the moment regulated in the case of the fixed incumbent only). There are ongoing termination disputes between originating providers and the fixed incumbent, which now sets its termination rate for these calls depending on the retail rate charged by each operator.

During 2009 Ofcom accredited a price comparison service 'Billmonitor' for mobile offerings. Ofcom also re-accredited for the second year two other price comparison sites, 'Broadband Choices' and 'Simplifydigital', which allow consumers to search for cheaper deals in fixed line, digital TV and broadband services. Operators indicated that these calculators are becoming increasingly popular among consumers. On the other hand, in 2009 Ofcom withdrew regulations requiring fixed voice providers to run the 'TopComm' website for comparing quality of service after having ascertained that this service was not delivering the expected results and had not been taken up by the consumers.

In 2009 Ofcom also carried out a broadband speeds survey comparing the six largest players. Some operators suggested that, for such a survey to be more objective, it should also tackle other relevant aspects such as customer service. In this area, Ofcom carried out a research exercise to consider consumers' needs for quality of service information. In its December 2009 consultation on providers' complaints handling and Alternative Dispute Resolution (ADR) procedures, Ofcom consulted on a number of options for providing consumers with comparative information on providers' handling of consumers' complaints.

In March, the Mobile Broadband Group, which brings together five UK MNOs and the two largest MVNOs, issued principles for marketing mobile broadband. Ofcom monitors how operators are meeting these principles. It also plans to carry out a project in 2010 assessing the network quality of mobile broadband services.

Universal Service

In December 2009 the Court of Appeal overturned the CAT judgment of November 2008, concerning the lawfulness of the current Universal Service Condition 7. USC7 currently obliges the fixed incumbent as universal service provider to make available its comprehensive telephone subscriber database, which it aggregates by gathering data from all the other operators, to alternative directory service providers on fair, reasonable and cost-oriented terms. Although the Court of Appeal concluded that USC7 was prohibited by the Universal Service Directive and other directives, the Court considered it necessary to obtain a preliminary ruling from the European Court of Justice before giving judgement. In 2009 Ofcom launched a review of the current Universal service obligations and on sharing the cost of providing Universal Service and expects to publish a consultation in 2010. These obligations are currently imposed on the fixed incumbent except in the Hull area where local fixed incumbent operator is the US provider. These two operators also bear the cost of US.

Users' access to the Internet and network management

Net neutrality was not reported to be an issue at the moment. The approaches to mobile VoIP differed among the MNOs – while some applied differentiated pricing depending on whether VoIP was allowed or not, others charged no extra fees.

The 'Digital Economy Bill' that Government submitted to Parliament in November 2009 provides that copyright owners may notify Internet operators of suspected infringements,

which operators then have an obligation to pass on to the subscriber. The process will be underpinned by an 'initial' Code either developed by stakeholders and approved by Ofcom, or in the in the absence of a stakeholder code, one developed by Ofcom. This code will set out the procedure of notifications and their content. Furthermore, the Bill provides that the Secretary of State may impose technical obligations on Internet service providers, which would then be implemented through another 'technical obligations' Code made by Ofcom. The measures include limitations on the speed or capacity of a broadband connection, preventing access to certain material, suspending the service altogether, or limiting the service in any other way. The Bill already lays down certain safeguards for users, including the right to appeal to the First-tier Tribunal. However, the details of the procedure will have to be set out in secondary legislation, which will need to comply with the newly adopted EU law requirements concerning suspension of access to Internet.

Number Portability

Following the CAT judgment of September 2008, which set aside Ofcom's decision to implement a recipient-led and near-instant process for porting mobile numbers as well as direct call routing supported by a central database to all ported numbers (fixed or mobile), Ofcom issued in August 2009 two new consultation documents on number portability. The first document proposes two options for changing the mobile porting process, including donor-led and recipient-led options and either a one-day or two-hour process. The second consultation sets out proposals for introducing direct routing for mobile voice calls to ported mobile numbers. The current indirect call routing system requires all communications providers to establish bilateral arrangements for routing calls to ported numbers.

Generally there are neither wholesale nor retail charges in the UK linked to setting up individual subscriber requests to port mobile numbers. However, due to the indirect routing arrangement the gaining provider pays porting conveyance charges to off-set the additional costs in onward routing of calls to ported-in numbers. The time limit for the porting of mobile numbers between networks is two days and the industry-agreed timeframe for issuing porting authorisation codes (PACs) by the donor operators, which are necessary to launch the porting process under the current donor-led mobile number portability system, is two days. Porting of fixed numbers takes no more than 1.5 days, while the entire switching process, including a period for the service provisioning and consumer validation (anti-slamming) processes, varies between 4 and 25 days, depending on the type of transfer and installation.

According to research commissioned by Ofcom in the framework of the above-mentioned consultations, 71% of mobile customers polled regarded mobile number portability as important when switching networks, yet only 45% of those who had switched networks had actually ported their number. Although Ofcom research also showed that, amongst those who had ported their number, 80% were satisfied with the process, this data suggests that there is room for greater uptake of number portability in the UK. In 2009, Ofcom launched a pre-enforcement programme to monitor complaints from customers concerning the mobile porting process, in particular the possible excessive 'save' activities and misinformation by donor operators in the process of providing PACs, which may act as a barrier to number portability.

Ofcom's review of number portability is expected to be completed in 2010. In 2010 Ofcom also plans to consult on the consumer switching process that exists across different industries. At the moment, switching broadband provider is a donor-led procedure while switching fixed voice service provider is a recipient-led process.

The Commission services will follow carefully the outcome of these activities.

Consumer complaints

Further to the consultation carried out in 2008, Ofcom adopted new rules concerning alternative dispute resolution (ADR) schemes, reducing from 12 to 8 weeks the time that the consumer must allow his or her communications provider to resolve a problem before taking the complaint to an ADR scheme. In addition, following a new market research, in December 2009 Ofcom issued a new consultation document with proposals for changes in regulation to secure improvements to consumers' experiences of making complaints and seeking redress.

In 2009 Ofcom introduced a new General Condition 23 in relation to the sale and marketing of mobile telephony services. Its purpose is to fight mobile mis-selling and it provides Ofcom with powers to take enforcement action against mobile service providers if they do not take sufficient action to prevent dishonest, misleading or deceptive conduct by their in-house sales channels or by retailers selling services on their behalf. On the same day Ofcom launched a monitoring and enforcement programme to ensure compliance with the new requirements.

Regarding fixed line telephony services Ofcom also introduced in 2009 a new General Condition 24 explicitly prohibiting certain sales practices, including mis-selling and slamming where customers are switched without their informed consent. In addition, an increase was observed in systems problems which lead to the wrong line being switched when a consumer seeks to change supplier or move home meaning that consumers may find themselves with a different supplier or even suffer loss of service. Via the Office of the Telecoms Adjudicator (OTA), Ofcom therefore launched an initiative to ensure systems improvements to reduce the harm from this occurrence. The OTA was also working with industry, on behalf of Ofcom, to establish a process for customers to be restored to their original service and contract, quickly and without cost, when they have been transferred in error. Ofcom publishes regular Consumer Experience reports. The fourth annual report was published in December 2009 and also evaluated the effectiveness of Ofcom regulatory activity to better serve the interests of consumers.

European emergency number 112

There were two noteworthy developments in this area during 2009. First, in October it became possible for the UK mobile users to call the emergency service numbers 112 and 999 from another network if their own network is unavailable and an alternative provider has coverage. Second, in September, an emergency SMS trial was started. The potential beneficiaries of this service were invited to register to be able to send a text message in an emergency. The system involves a relay assistant who will speak the SMS message to the emergency service, then type their reply which is converted into a SMS message and sent back to the sender.

According to the Eurobarometer Flash survey (February 2010), only 8% of respondents in the UK knew that they could call emergency services across the EU by using 112, which remains one of the lowest awareness levels within the EU where on average 25% of respondents know 112 as the EU-wide emergency number.

Harmonised numbers for harmonised services of social value (116)

Further to the consultation in 2008, Ofcom set out its general approach to implementation of '116' numbers in the UK in February 2009. A comparative selection process was developed to assign each 116 number to the most appropriate partnership comprised of the service provider and its chosen communications provider. The service providers for the initial three '116' numbers: 116000 'Hotlines for missing children'; 116111 'Child helplines'; and 116123

‘Emotional support helplines’ were selected in October 2009 with services expected to be launched on the numbers in 2010. These numbers were designated by Ofcom as ’free to caller’ in the Numbering Plan meaning that there will be no charge irrespective of how the call is made.

ePrivacy

On 14 April 2009 the Commission launched an infringement proceeding against the UK concerning incorrect transposition in UK law of EU law requirements concerning confidentiality of communications provided in the ePrivacy Directive 2002/58/EC and the Data Protection Directive 95/46/EC concerning user consent, sanctions in case of infringements and independent authority to supervise interception activities. On 29 October, further to analysis of the UK authorities' response to the letter of formal notice, the Commission proceeded to the next stage of the Reasoned Opinion.

There is no legal requirement for UK mobile customers using pre-paid cards (‘pay as you go’ customers) to register with their operators.

LIST OF ACRONYMS

ADSL	Asymmetric Digital Subscriber Line
ANFP	Access Network Frequency Plan
API	Application Program Interface
ARPU	Average Revenue Per User
ATM	Asynchronous Transfer Mode
BARO	Broadband Access Reference Offer
BU-LRAIC	Bottom-Up Long Run Average Incremental Cost
CAPEX	Capital Expenditure
CDMA	Code-Division Multiple Access
CLI	Calling Line Identification
COCOM	Communications Committee
CPS	Carrier Pre-Selection
CS	Carrier Selection
DCS	Digital Cellular System
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
DTT	Digital Terrestrial Transmission
DTTV	Digital Terrestrial Television
DVB-H	Digital Video Broadcasting - Handheld
DVB-T	Digital Video Broadcasting – Terrestrial
ECAS	Emergency Call Answering Service
ECJ	European Court of Justice
EDC	Embedded Direct Costs
EFODIA	National Optic Fibre Infrastructure
EMC	Electromagnetic Compatibility

ENISA	European Network and Information Security Agency
EPG	Electronic Programme Guides
ERG	European Regulators Group
ESD	Electronic Services Delivery
FAHC	Fully Allocated Historic Costs
FDD	Frequency Division Duplex
FLRAIC	Long Run Average Incremental Cost
FNP	Fixed Number Portability
FTR	Fixed Termination Rates
FTTB	Fiber to the Building
FTTC	Fiber to the Curb
FTTH	Fiber to the Home
FTTLA	Fibre To The Last Amplifier
FTTx	Fibre To the X
FWA	Fixed Wireless Access
FWALA	Fixed Wireless Access Local Area
GDP	Gross Domestic Product
GIPON	Gigabit Passive Optical Network
GNP	Geographic Number Portability
GSM	Global System for Mobile Communications
HDTV	High Definition Television
HSPA	High Speed Packet Access
HSPDA	High Speed Downlink Packet Access
HY-LRAIC	Hybrid Long Run Average Incremental Cost
ICT	Information and Communication Technologies
IP	Internet Protocol
IPTV	Internet Protocol Television

IRR	Internal Rate of Return
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
IT	Information Technology
ITS	Intelligent Transport Systems
ITU	International Telecommunications Union
KPI	Key Performance Indicator
LAN	Local Area Network
LLU	Local Loop Unbundling
LRAIC	Long Run Average Incremental Costs
LRIC	Long Run Incremental Cost
LTE	Long Term Evolution
Mbps	Megabit Per Second
MDF	Main Distribution Frames
MMDS	Multichannel Multipoint Distribution Services
MMS	Multimedia Messaging Service
MNO	Mobile Network Operator
MNP	Mobile Number Portability
MPEG	Moving Picture Experts Group
MPLS	Multiprotocal Label Switiching
MTR	Mobile Termination Rates
MUX	Multiplexers
MVNE	Mobile Virtual Network Enabler
MVNO	Mobile Virtual Network Operator
NCA	National Competition Authority
NFP	National Frequency Plan
NGA	Next Generation Access

NGN	Next Generation Network
NGNP	Non-Geographic Number Portability
NPV	Net Present Value
NRA	National Regulatory Authority
ODF	Optical Distribution Frame
OECD	Organisation for Economic Co-operation and Development
PAC	Porting Authorisation Code
PATS	Publicly Available Telephony Service
PBX	Public Branch Exchange
PIN	Personal Identification Number
PPC	Partial Private Circuits
PSAP	Public Safety Answering Point
PSTN	Public Switched Telephone Network
RBO	Reference Bitstream Offer
RDSLO	Reference DSL Offer
RIO	Reference Interconnection Offer
RLO	Reference Line rental Offer
RUO	Reference Unbundling Offer
SB-WLR	Single Billing via Wholesale Line Rental
SDF	Sub Distributin Frame
SIM	Subscriber Identity Module
SLAs	Service Level Agreements
SLU	Sub-Loop Unbundling
SMP	Significant Market Power
SMS	Short Message Service
TDD	Time Division Duplexing
UHF	Ultra High Frequency

ULMP	Unbundled Local Metallic Path
UMTS	Universal Mobile Telecommunications System
US	Universal Service
USB	Universal Serial Bus
USD	Universal Service Directive
USO	Universal Service Obligations
USP	Universal Service Provider
VDSL	Very high Bit Rate DSL
VHF	Very High Frequency
VoB	Voice Over Broadband
VoD	Video On Demand
VOIP	Voice Over IP
VPN	Virtual Private Network
WACC	Weighted Average Cost of Capital
WBA	Wholesale Broadband Access
WCDMA	Wideband CDMA
WEA	Wholesale Ethernet Access
WLA	Wireless Local Access
WLL	Wireless Local Loop
WLR	Wholesale Line Rental
WPC	Wholesale Price Cap