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COMMUNICATION FROM THE COMMISSION

TO THE COUNCIL, THE EUROPEAN PARLIAMENT,
THE ECONOMIC AND SOCIAL COMMITTEE
AND THE COMMITTEE OF THE REGIONS

UNIVERSAL SERVICE FOR TELECOMMUNICATIONS IN THE PERSPECTIVE OF A FULLY LIBERALISED ENVIRONMENT

AN ESSENTIAL ELEMENT OF THE INFORMATION SOCIETY

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I INTRODUCTION

In the emerging information society more and more people - in private life and at work - depend on modern communications. To be able to communicate and interact whether by telephone, fax, e-mail or electronic media is a crucial and decisive factor for every citizen and business. The policy of the European Commission towards the information society has from the beginning taken into account the need to avoid a "two-tier-society", divided between those who have access to the new possibilities and are comfortable using them and those who are excluded from fully enjoying their benefits.

Universal service is a dynamic and evolving concept. It is one of the essential elements of this information society and the priority attached to it must be considered in the context of the Community's policy of fully opening telecommunications markets to competition from 1 January 1998[1].

The telecommunications sector is an area of startling innovation and rapid technological evolution. It is critical for the overall competitiveness of Europe's economy. 1998 is a central gateway to the information society as effective competition ensures that both business and residential users have the benefits in terms of choice, quality and the best possible prices. Within this framework, the current concept of universal service, found in the Voice Telephony Directive[2], corresponds to the **obligation to provide access to the public telephone network and to deliver an affordable telephone service to all users reasonably requesting it.** This **concept is improving the level of service currently found in the Community** and operates as a guarantee that these advantages are widely spread and that the interests of consumers are actively promoted.

In the light of the political agreements of 1993 and 1994 resulting from the Commission's 1992 Telecommunications Review[3] in favour of the full liberalisation in the sector, the Council[4], the European Parliament[5], the Economic and Social Committee[6] and the Committee of the Regions[7] have all recognised that liberalisation goes hand in hand with parallel action to create a regulatory framework which secures the delivery of universal service.

The European Parliament emphasised: "*the central importance of universal service principles, in order to ensure the complementarity between economic and social goals ... and the balance between liberalisation and the need to maintain basic, affordable services for all consumers*", whilst Council identified universal service as permitting *"access to a defined minimum service of specified quality to all users everywhere and, in the light of specific national conditions, at an affordable price".*

To respond to these positions, the regulatory framework for universal service at a Community level which has been put in place identifies the scope of such service; addresses the notion of affordability and is in the process of establishing rules for financing that service in a liberalised environment.

It is against this background that the Commission has prepared this Communication. It has done so in the light of the results of a survey of the level and quality of service found in the Member States and of a public consultation on universal service issues during Autumn 1995[8]. (The detailed results are set out in the annexes two to four of the Communication). The aims of the Communication are threefold:

- Firstly, to describe the current concept of universal service in telecommunications, both in terms of the regulatory framework and in terms of the current level of universal service provision in the Member States;

- Secondly, to address practical issues and propose solutions and action for the future development of universal service; and

- Thirdly, to place universal service for telecommunications in the broader context of the information society.

II THE CURRENT CONCEPT OF UNIVERSAL SERVICE IN TELECOMMUNICATIONS IN THE EUROPEAN COMMUNITY

The need for a concept of universal service at a European level

In the past there was no harmonisation at a European level of universal service in the telecommunications sector. Priorities were set at a national level and in the absence of competitive forces in most Member States this produced mixed results; positive developments such as full network digitalisation in France or the very high levels of service penetration in Scandinavian Member States, but also worrying failures in certain countries in terms of poor service, long waiting lists to get a phone or long delays in repairing faults[9].

Were such a pattern of very different levels of development, which characterised the monopoly environment, to continue unchecked, it would substantially undermine the goal of strengthening economic and social cohesion set out in the Treaty. The same concern to achieve balanced development within the different parts of the Community must also apply in a liberalised environment.

In addition, the existence of a certain minimum set of services is essential for the development of the internal market. Different levels of service obligations in the Member States would hamper the take-off of Europe-wide telecommunication services.

The absence of coherent national approaches to universal service could also create new barriers to effective competition.

A further political impetus has been given with the entry into force of the Maastricht Treaty introducing the obligation to maintain a high standard of consumer protection within the Community's policies[10]. In this regard, the competitive forces which liberalisation will unleash will be major factor in improving consumer choice and service quality.

What is the universal service obligation being put in place in the European Community today?

With the adoption by the European Parliament and the Council of the Voice Telephony Directive in December 1995 the Community has now for the first time identified the common scope of universal service obligations in the EC. In doing this it has chosen to create obligations which will guarantee a defined level of service in a liberalised environment and which will improve the current level of service in many parts of the Community.

This detailed description of universal service found in the Voice Telephony Directive is completed by the package of measures, (which address the practical

arrangements for universal service), which have been tabled as part of the preparation for a liberalised environment[11].

The final element in the current concept will be provided by guidelines which the Commission will use in assessing the way Member States propose to finance universal service. These will be published in **September 1996**.

The definition of universal service which emerges from the framework outlined above sets the maximum scope of services which can be included in any calculation of the cost of the universal service. Only those costs may be shared amongst other market players.

At the same time, Member States in line with subsidiarity remain free to set additional telecommunications-related obligations to provide particular technologies or facilities (such as digital mobile networks or ISDN services) and/or to set service and coverage targets at a national level, providing these are proportional, non-discriminatory, imposed in a transparent manner and consistent with the competition rules. Any additional financial burden associated with meeting such obligations must not funded out the mechanism established for funding universal service..

a. *Scope*

The obligations set out in the Voice Telephony Directive comprise the **provision of voice telephony service via a fixed connection which will also allow a fax and a modem to operate**[12], as well as the provision of **operator assistance, emergency** and **directory enquiry services** (including the provision of subscriber directories) and the **provision of public payphones**.

Users should also have access to **published information about the cost and prices** of services, about their quality and whether **targets for quality** are being met[13].

By including network access within the scope of universal service, **users are given the possibility of accessing not only the defined voice telephony service but <u>all</u> services that can be provided over today's telecommunications networks** (i.e. every citizen will be able to access inter-active and on-line information services including the Internet, provided they have a computer and a subscription with an Internet service provider[14]). Nevertheless, the quality and speed of the connection will influence the ease with which these services can be used.

This scope meets the concerns of the European Parliament that users should have an efficient, reliable and affordable service, with defined (and monitored) levels of service in respect of the time taken to get a telephone connection installed; the quality of transmission and reception of calls and the time taken to repair faults. The Directive in promoting new services also meets the Parliament's call for highly specific service elements, such as the availability of itemised billing, calling line identification, touch-tone dialling and number portability[15].

b. *Affordability*

Whilst a political consensus has emerged on affordability as a key element in any concept of universal service, this is not yet an explicit requirement of the Voice Telephony Directive. **Affordability is a matter to be determined at a**

national level because it is so closely linked to specific national circumstances and national policy objectives (such as regional development policy).

The current concept of universal service simply allows national regulatory authorities to impose controls on pricing linked to universal service and regional development policies. Such an approach is consistent with the principle of subsidiarity. In contrast to areas such as technical performance or quality of service, where objective standards may be defined, it does not appear appropriate to establish a maximum or minimum level for affordability (implying price regulation at a European level) which should apply to all Member States.

Nevertheless, **affordability is crucial to the extension of telecommunications service to every citizen** and progress made in Member States will be closely monitored (see Section III below).

c. *Financing of universal service*

The shift from a monopoly environment to competition means that rules are needed to determine the extent to which any financial burden associated with providing universal service is shared out amongst market players. Common rules across the Community are also needed to calculate how much providing universal service costs.

The measures identifying the scope of universal service is therefore accompanied by principles for its costing and funding through the proposed framework for interconnection[16], as well as a mechanism allowing the Commission to verify whether national schemes for universal service are in line with the Community framework[17].

This framework envisages payments being made either (i) into an **independent universal service fund** at a national level which would make payments to operators providing universal service or (ii) **directly to operators providing universal service** as an additional payment to the commercial charges for interconnecting with their network.

These rules will be complemented later this year by the guidelines on costing and funding identified above.

The regulatory certainty which the current framework is establishing has been essential to allow Member States to prepare their national regulatory environment in time for the 1998 deadline. Where this Communication refers to the Community framework it is therefore referring to this whole package of measures preparing the environment for full liberalisation, unless otherwise specified.

The improvement of service levels between 1990 and 1995

The level and range of telecommunications services offered in the European Union has improved over the last five years (See Tables in Annex 2). Users are seeing this in very practical ways. Choice is no longer limited to the colour of the telephone set. Waiting lists for a telephone line have been substantially reduced in almost every Member State. Faults occur less frequently and are repaired more quickly. In many countries customers are compensated if appointments are missed or the line is out of action for too long.

In Denmark, France, The Netherlands, Finland, Sweden and the UK more than 9 out of every ten homes have a telephone (see Table A1 in Annex 2), whilst in

Germany the figure in very close to nine out of ten, even taking account of reunification. Improvements have also be seen in some of the less favoured regions of the Union, for example, the national phone network in Ireland and Portugal have been substantially extended with the percentage of homes with a telephone growing from 66% and 47% respectively in 1990 to 80 and 75% today. partly reflecting the investment provided through the Community's Special Telecommunications Action for Regional development (STAR) programme.

In relation to the prices of telecommunications services, the general trend since 1990 has been for fixed elements, (connection charges and rentals) to increase, as well as increases in peak rate local calling. At the same time, important reductions have been seen in international and long-distance prices and many Member States have extended the availability of cheap rate local calling to compensate for the increases in peak rate charges. From the questionnaire completed by the Member States, seven out of eight Member States who were able to provide an average figure for price changes showed that overall prices had decreased in real terms by between 5 and 43%.

User demands are becoming much more sophisticated. A rapidly increasing proportion of citizens are using a mobile telephone. In Scandinavian Member States the figure is close to one in four. At home the telephone line is no longer just connected to a telephone or an answering machine, it may be shared with a fax or a modem. There are a wide range of freephone and value-added services available and even in the basic telephony service many users are offered new advanced telephone facilities, such as the possibility of forwarding their calls to another telephone number or being informed that there is another call on the line.

Whilst the overall trend is one of improvements in the level and quality of service, continued pressure through competitive forces and through regulation is required to ensure that this process continues and accelerates as competition takes hold.

What are the reasons for this steady improvement in telephone services?

Improvements in quality and choice are a direct response to the falling costs and greater reliability of new services and equipment. Competition too in terminals, value-added service and mobile communications have stimulated innovation, lower prices and better customer service. The separation of the operator and the regulator of telecommunications services, a requirement of Community law since 1990, has led to more effective regulation as the State has sought to impose clear targets, often in the form of licence conditions or negotiated contracts, with its incumbent operator.

III ISSUES FOR THE EVOLUTION OF UNIVERSAL SERVICE IN THE SHORT TERM

It is clear from the public consultation that a range of concerns remain about both the current level of service and the impact of a liberalised environment.

Concerns remain despite the overall improvements in service.

- Why does the Community at present not take a broader definition of universal service?
- How will the affordability of universal service be maintained in a liberalised environment?

- What will happen to uniform national prices in a fully liberalised environment?
- How can universal service be improved in the less favoured and less populated regions and areas of the Community?
- Is adequate service provided to users with disabilities or special needs?
- Are quality of service standards being effectively monitored and enforced in the Member States and what will be the European Community's role in setting those standards?
- How can users compare service levels, prices and even affordability in different Member States more effectively and how can users have a stronger role in setting quality of service standards and the level of affordability?

Why does the Community at present not take a broader definition of universal service?

Defining the **scope of the universal service obligation represents a delicate balance**. Too narrow an vision of universal service and citizens may be kept out of full participation in society. Too broad a vision and the competitive forces which are the principal driver of better services, lower prices and greater innovation will be held back as new players in the market will be deterred from entering the market. It is in striking that balance that the interests of every citizen can be best secured.

The universal service obligation does not include at this stage a requirement to provide leased lines[18] or ISDN[19]. These are services whose provision on the basis of cost-oriented tariffs is, however, already either required or recommended throughout the European Union. Any broad extension of universal service obligations is felt to be premature at this stage, particularly because :

- it could end up making users and households pay for services they neither need nor use;
- the costs involved (where these have to be shared with the other players in the market, e.g. through a universal service fund) might actually deter market entry by those companies, delaying the arrival of the benefits which competition will offer to all users; and
- it risks providing or even subsidising services which users may be able to pay for on a normal commercial basis.

The provision of an affordable voice telephony service will already mean that households and businesses in any part of the Community can talk to each other, send faxes and electronic mail, hook up computers to "surf" the Internet and other on-line services. This is the same telephone line over which services such as telephone banking, tele-shopping and on-line information services are already being consulted and down which even video-on-demand services could be sent.

At the same time, the current failure in some parts of the Community (as shown by the results of the survey of Member States) to guarantee even this basic level of service would, if not corrected by a regulatory framework allowing new investment to proceed and a strong and active national regulatory authority, have risked increasing regional disparities and the creation of the two tier society identified above. A **first priority must therefore be the delivery of genuine universal**

service throughout the Community, and, in particular, throughout the Community's less favoured regions.

All the same there is broad recognition that **universal service is a dynamic and evolving concept** and **must respond to changes in the needs and expectations of Europe's citizens**. This implies that the scope of universal service must be reviewed as a basis for more concrete policy action, where appropriate. Nevertheless those subject to universal service obligations require a degree of certainty against which investment decisions can be made. The speed of evolution of the concept has therefore to be balanced against the need for predictability for investment decisions.

The Commission will therefore **report by 1 January 1998** and, at regular intervals thereafter, on the scope, quality, level and affordability of the universal service in the European Community and consider the need, in the light of the prevailing circumstances for adaptation of the scope of universal service at a European level, bearing in mind the need to ensure a predictable regulatory environment.

The main issues to be addressed in that Report as well as the criteria for this evolution are returned to in Section IV below.

How will the affordability of universal service be maintained in a liberalised environment?

Whilst costs have fallen dramatically for operators, these have not often been passed on in the form of lower prices for users. Price levels vary considerably between Member States (See Table A7 in Annex 2 for a comparison of 1995 price levels in ECU). Now, as competition approaches, operators are attempting to adjust their prices. This reflects both existing requirements of the Community framework for prices in a monopoly environment to be cost-oriented[20], and the threat of competitors charging lower prices for the most profitable services (i.e. business, long-distance and international communications).

This process of tariff rebalancing, resulting from the political decisions in favour of the liberalisation of the sector, means that for some users, particularly in the short-term before real competition bites, telephone bills could rise[21]. This process remains a fundemental element of the preparation for a fully liberalised environment[22]. At the same time, it is **essential to ensure that further progressive and necessary rebalancing does not adversely affect users**, particularly residential consumers who make few long-distance and international calls and so cannot benefit from the lower rates in those areas. This fundamental concern was well reflected in the public consultation which raised the fact that the **current framework, whilst promoting affordability, does not yet impose explicit obligations for services to be provided at an affordable price**.

In the short term it is very important to protect the most vulnerable groups of users, and residential users in general, from the effects of the rebalancing process. Member States should ensure that National Regulators adopt, where necessary, special tariff packages[23], price caps[24] and other mechanisms in order to moderate the effects of the rebalancing process on connection charges, monthly rental and tariffs. This is particularly important in the run up to a liberalised environment and for users in the Community's less favoured and less populated regions. Such targeted and special tariff schemes are already in place to varying degrees in all Member States and are listed in Table A10 of Annex 2. Potential burdens associated with their provision may be financed out of the funding mechanism for universal service.

As mentioned above, the Monitoring Report before 1 January 1998 will also assess developments in the pricing of different telecommunications services and consider the need for further action at a Community level to ensure affordable access for every citizen.

Even so, the issue is affordability rather than stopping any adjustment of pricing structures. The affordability of the overall service for all users, and, especially for particularly vulnerable groups, such as the disabled, or those on low incomes must be maintained. Assessment of affordability is principally an issue to be decided at a national level by the appropriate national regulatory authority within the framework provided by Community legislation, taking account of the specific national situation and the views of user and consumer organisations. Consumer organisations have also suggested the need for comparison at a European level of the relative affordability of services.

Affordability is not only a matter of overall price, for many users it is also a question of managing weekly and monthly expenditure and being able to predict what the telephone will cost.

As soon as competition is effectively established a much wider range of payment packages are likely to be offered, for example, spreading the installation charge over a series of quarterly payments or paying a higher monthly rental, but with free or cheaper local or national calling. Such flexibility would allow users, particularly those on low incomes, much better predictability over what the telephone would cost them each month.

At the same time, many users also want more information from their bills about what they spend.

Finally, users also want greater control over what they spend, for example, the possibility of barring calls to particular numbers, such as "premium" rate services or international calls.

What will happen to uniform national prices in a fully liberalised environment?

In a fully liberalised environment the way services are packaged and priced is likely to be much more innovative, offering real choice and potential savings to most users. At the same time, as highlighted above, a **fundamental responsibility for national regulatory authorities will be to ensure that universal service is affordable for all groups of users,** whether as a response to competition or as a result of regulatory intervention.

This involves an assessment by the regulator of what in light of specific national circumstances can be considered as a "reasonable" price for users in particular regions.

Member States currently require at least the incumbent operator to provide a standard nation-wide package of prices (effectively, a set of geographically averaged tariffs) for most, if not all telecommunications services (including basic voice telephony services). The result is that the same tariff bands are offered throughout the country, even if the cost of providing a connection and services in one region may be higher than in another. In the past this helped to ensure that services remained affordable for citizens in every part of a country.

In a monopoly environment such geographic price averaging does not automatically mean that operators are making a loss in providing every service in

those high cost areas, because in the absence of competition they can charge prices for services which are not part of universal service, such as leased lines, which ensure a profit even in high cost areas..

In a liberalised environment, any approach to uniform pricing must guarantee and improve affordability. However, the situation is altogether more complex than before.

As competition establishes itself, particularly in cities and other areas which can be served relatively cheaply, new players may concentrate on customers there and offer lower prices than the incumbent.

Strictly maintaining uniform national prices would (i) if prices were maintained at current levels, risk the incumbent operator losing substantial parts of its market share in the cities and low cost regions; (ii) if prices were lowered nationally to meet lower prices offered by competitors in certain areas, raise the amount of funding required from other market players to cover the gap left by the potentially lower revenues in high cost areas from which universal service had be funded[25].

Competitive pressures are likely to encourage over time a progressive move away from strict geographic averaging towards considerably more flexible tariff structures, This is likely to mean that different tariffs are offered for the same services in different areas within a Member State.

Greater flexibility must be conditional upon the **regulatory framework** (i) **including adequate measures to ensure affordability** (such as those outlined above); (ii) ensuring that price increases for **users in remote and rural areas, other than adjustments to achieve cost-orientation, are not used to compensate operators for losses in revenue resulting from price decreases elsewhere** and (iii) ensuring that any differences in pricing between high cost areas and low cost areas do not endanger the affordability of universal service.

How can universal service be improved in the less favoured and less populated regions and areas of the Community?

Whilst the current regulatory framework, (and in particular, the obligations in respect of the voice telephony service, interconnection and the minimum set of leased lines), has been designed to guarantee the provision of universal service throughout the Community, the Commission and Member States remain aware of the particular pressures faced in the less favoured and less populated regions[26].

The issues of **scope and affordability of universal service, and of telecommunications services in general, are of critical importance to the Community's less favoured regions**. This reflects the traditionally lower level of development, demand and incomes in such regions and the sometimes higher costs of installing, operating and maintaining facilities due to the location or climate.

These concerns, highlighted by a number of operators, regulators and user associations located in these regions, become all the more critical in the context of the information society. The **Commission will continue to work to ensure that a combination of liberalisation and new technologies reduces rather than widens existing regional differences** within the European Community.

Given that full liberalisation has not yet touched many of the Community's less favoured regions, it is difficult to assess its real impact and the positive effects which may be brought in terms of improvements in service quality, choice and

prices, as well as increasing private investment. Additionally, the costs of providing service in remote and rural areas are continuing to fall as a result of new technologies (such as mobile or wireless solutions) and may fall further, where telephony services can be offered in combination with other new services (including audio-visual services and information services).

Experience in liberalised markets, such as the United Kingdom, Finland and Sweden, or in the rapid growth of digital mobile communications under a duopoly environment are however, encouraging, though some caution must be exercised in directly extending the experience of more developed countries in the Community with relatively higher standards of living to other regions in the Community, particularly given the higher relative current costs associated within providing universal service in less favoured regions[27].

On the other hand, there are important concerns about the more marked impact of price changes on both residential and business users in these regions and the speed with which they will enjoy benefits associated with competition compared with developed areas within the EC. Additionally, the process of liberalisation in releasing private investment may favour investment in services and infrastructure in areas of high demand and relatively low cost.

The Commission must be vigilant against the danger that the different speeds at which territories of the Community equip themselves with the infrastructures, services and skills needed for the emerging information society may contribute to sustaining a "time gap" and to further widening of social and economic disparities. These issues must obviously be taken into account within the Community's cohesion policy.

In relation to the twin concerns of encouraging network investment and the provision of services throughout each Member State and avoiding a significant time gap in development in different Member States, **priority must continue to be attached at a national and Community level to the development and extension of existing networks.**

In addition to the framework provided by universal service, the Community Structural Funds, as well as other initiatives at Community and national level, will continue to contribute as a complement to private financing - to the task of upgrading and developing the telecommunications infrastructure in less favoured regions within the Community, as has been successfully achieved in many parts of Ireland.

In particular, the **completion of the programmes of network digitalisation**, especially in Greece, Portugal, Spain and Southern Italy, should be an important priority. Account is also taken of the need for relevant training initiatives and for pilot projects aimed at stimulating awareness and demand.

For all these reasons, there is a particular need for close monitoring of **developments in these regions** in order to take appropriate action to strengthen economic and social cohesion. Detailed aspects of this monitoring, particularly with regard to the evolution of prices and the collection of data allowing a comparison of the relative affordability of services are set out below.

In the light of such monitoring, the Commission will determine periodically whether the definition and scope of universal service has to be revised, or new or existing mechanisms (for example, regional development policies) used to take account of specific effects of liberalisation in these regions.

Is adequate service provided to users with disabilities or special needs?

Certain groups of customers have special needs, which universal service today either does not always meet, or does not do so at an affordable price. This concern has been highlighted by the European Parliament. Telecommunications offers such users a real lifeline with the rest of their community and the concept of universal service should ensure that such users benefit from **an equivalent level of service at an affordable price to that offered to users without disabilities**, taking into account the state of network development and market demand. Examples cited in the consultation included both the provision of services in the home (such as video- or textphones for the deaf) and in public places. It could also include, where necessary, the provision of special services (such as relay services allowing textphone users to communicate with users without textphones), or specially adapted equipment.

A second element in extending the current coverage of service to specific users might include the offer of special and innovative services (such as voice mail boxes in the public network) for users who cannot easily receive calls because they do not have access to their own telephone. Those benefiting from such a service, which is being trialed in a number of Member States, might include groups such as the homeless, thereby recognising the role of telecommunications in fighting social exclusion.

It would be a matter of national social policy, rather than universal service funding mechanisms as to whether specific financial support was made available to ensure the affordability of such services for particular groups of users.

Are quality of service standards being effectively monitored and enforced in the Member States and what will be the European Community's role in setting those standards?

The Voice Telephony Directive already requires Member States to set quality of service indicators for a range of different things, such as how long it takes to get a telephone, how long it takes a call to connect and what proportion of public payphones are in working order. This simply builds on current practice in most Member States. Results must be published of the performance of the operators required to meet these targets.

Whilst this provides greater transparency, it will only be fully effective if supported by active monitoring, and where appropriate, enforcement of such standards (with an appropriate range of sanctions up to the possible withdrawal of licences, where there is a consistent failure to meet service targets) by the telecommunications regulator in the Member State. Furthermore, there should be clear and straight-forward procedures allowing users to initiate complaints against the operator.

Looking beyond the current framework, it is important that the different levels of service quality, as well as differing targets set at a national level, do not create barriers to the development of the internal market and distort competition within the Community. Equally, it is essential that in setting service levels Member States maintain a high standard of consumer protection.

In this context and subject to the principle of subsidiarity, minimum quality of service targets should be defined at a European Community level as a reference within which detailed national targets (taking account of the specific situation of each Member State) would be set.

How can users compare service levels, prices and even affordability in different Member States more effectively and how can users have a stronger role in setting quality of service standards and the level of affordability?

It is clear that despite overall improvements, there remains considerable variation in the quality and level of service in the Member States and in the degree to which sanctions exist and are used , where targets are not met by operators. This concern is compounded by the difficulties faced by some national regulatory authorities in obtaining basic indicators of universal service, such as the number of households with a telephone, and by the lack of comparability of certain of data between Member States.

The obligations in the Voice Telephony Directive should help by imposing obligations to set and publish quality of service indicators at a national level. However, users seek more than this and the varying levels of service in the Member States impacts the provision of pan-European networks and services.

More generally consumer involvement at both a national and European level in the setting of quality of service targets, and more generally, in decisions as to the future evolution of universal service, should be strengthened.

MONITORING THE EVOLUTION OF PRICES AND THE RELATIVE AFFORDABILITY OF TELECOMMUNICATIONS SERVICES IN THE EUROPEAN COMMUNITY AND ADAPTING EUROPE'S TELECOMMUNICATIONS FRAMEWORK IN THE SHORT TERM IN RESPONSE TO THE CONCERNS OUTLINED ABOVE

I. MONITORING THE EVOLUTION OF PRICES AND RELATIVE AFFFORDABILITY OF SERVICES

In line with the overall proposal to review by 1 January 1998 the scope, level, quality and affordability of universal service in the Community, the **Commission intends, in close co-operation with the Member States** and building on on-going work at a national level, to :

√ **define a "basket of services" in order to provide comparable information about the relative affordability of services within the Community and between different regions within the Member States;**

√ **identify the structure of spending on universal service in the Community** (i.e. what proportion (at both a national and regional level) of average residential and business bills relate to rental; local, long-distance and international calls; and calls to value-added ("premium-rate" services), and

√ **identify where the major costs of universal service are incurred** (i.e. within urban or rural areas; on targeting subsidies to specific groups of customers or to particular high cost areas), within the Member States.

The results collected will allow the Community and Member States to better target support and identify best practice.

II ADAPTATION OF THE EUROPEAN TELECOMMUNICATIONS FRAMEWORK IN THE SHORT TERM

The Commission intends to address the following issues, in particular through an amendment to the Voice Telephony Directive[28]: These steps will:

√ Develop further the definition of universal service to provide a clear obligation for Member States to ensure its **affordable** provision[29]; to ensure that an equivalent level of service is offered to users with disabilities at an affordable price; to provide users with more information about and more control over what they are spending[30]; and to ensure users can access and use interactive services (such as tele-banking or automated switchboards)[31].

√ Require Member States to remove restrictions which currently limit the offer of **targeted or flexible tariff schemes;** and to ensure that they take appropriate **measures (e.g. targeted tariff schemes and price caps)** necessary to maintain the affordability of services for all users, as well as for particularly vulnerable groups, such as the elderly, those with disabilities, those who do not use the telephone very much or those on low incomes. These measures are particularly important in the run up to full liberalisation.

√ Taking account of the obligation progressively to adjust tariffs towards costs, require Member States to ensure:

- that price increases in remote and rural areas are not used to compensate losses in revenue resulting from price decreases elsewhere; and

- that differences between prices in high cost areas and low cost areas do not endanger the affordability of universal service.

√ Ensure more **information on the scope, level, affordability and quality of service in the EC is collected**[32]. This is essential if universal service is to be kept under effective review and appropriate targets are to be set for service quality within the existing Community framework.

√ Define minimum quality of service targets at a European level as a basis upon which detailed national targets (taking account of the specific situation of those countries) would be set.

Furthermore the Commission will

√ Encourage Member State and Community action to allow all users to have improved access to computer networks, such as the Internet[33], (in terms of faster network access speeds).

√ **Report by 1 January 1998** and, at regular intervals thereafter, on the quality, level and scope of the universal service in the European Community. This Monitoring Report will look in particular at developments in relation to residential users and in the less favoured regions, including the progress made in rebalancing tariffs, . (Other issues to be addressed in that Report are set out in Section IV below). As mentioned above, the report will consider the need, in the light of the prevailing circumstances for adaptation of the scope of universal service at a European level, bearing in mind the need for predictabity for investment decisions.

√ Promote the greater involvement of consumer representatives in the decisions on the current and future scope of universal service (and in particular, in relation to establishing and monitoring of the quality of service and the affordability of service). This will rely on the adequate availability of information on the scope, level, quality and affordability of universal in the EC in order to ensure greater transparancy and effective involvement of residential users. Consideration will be given to a possible monitoring committee at a European level to represent consumer interests.

A Timetable reflecting these measures is set out in Annex 1.

IV THE EVOLUTION OF UNIVERSAL SERVICE FOR TELECOMMUNICATIONS AND ACCESS TO ADVANCED SERVICES IN THE CONTEXT OF THE INFORMATION SOCIETY

Universal service is recognised as an essential element of the global information society. This was acknowledged at the special G7 Summit on the information society in Brussels in February 1995. The participating ministers identified "*ensuring universal provision of and access to services*" as one of the eight core principles behind the realisation of their common vision of the information society.

The Community is supporting through the regulatory framework the delivery and development of universal service, whilst at the same it is looking beyond the current concept of universal service for telecommunications to promote actively, through a diverse range of initiatives the use of advanced telecommunications services in fields, such as education and healthcare, in the context of the information society, (for example, through pilot and stimulation projects, awareness building and development of public-private partnerships).

The recent reform of telecommunications in the United States also looks beyond the current concept of universal service for telecommunications, which in their legislation consists, for example, in promoting widespread access to quality services at reasonable rates and ensuring that rural and high cost areas have access to telecommunications and information services at prices reasonably comparable with those offered in urban areas[34].

The US telecommunications legislation, however, looks beyond their basic definition of universal service to tackle within a regulatory framework the same priorities which are now on the Community's agenda. The US legislation identifies the provision of access to advanced telecommunications services for schools, healthcare and libraries as one of the principles for the "advancement of universal service" in the future. In contrast, to the approach in the Community, the United States appears to mix a policy on universal service for telecommunications with objectives linked to education, healthcare or information policies at a national level.

In the Community, the regulatory approach to universal service for telecommunications is carefully circumscribed by the application of the principal of subsidiarity. This has limited action at a Community level to what is necessary for the internal market for telecommunications services and for the maintenance of a high standard of consumer protection. In any event, the evolution of the definition of universal service for telecommunications is only one of a number of factors which is influencing the roll out of advanced telecommunications services in the Community.

Criteria for the evolution of universal service for telecommunications in the Information Society

Determining the basis for the future evolution of universal service raises fundamental issues. Should universal service for telecommunications continue to be subsidised only by undertakings in the sector or should other means of funding (e.g. greater direct funding by the State / stimulation of public-private partnerships) be envisaged? Should the framework being put in place at a Community level simply provide a response to the risk of that market forces alone will not provide an adequate guarantee of affordable service for every citizen or should it be something more - seeking to steer and develop the evolution of markets and/or technologies? A simple answer cannot be given at this stage. In reality the challenges of the information society will be met by both an evolving concept of universal service and by a range of other public and private sector initiatives to stimulate demand for and supply of information society services.

User demand and technological evolution must be the principal determinants of the future evolution of universal service[35].

Any extension is therefore likely to combine a market-based analysis of the demand for, and widespread availability of, a particular service, and a political assessment of its social and economic desirability. Only when these two criteria are satisfied would it be justifiable to impose a legal obligation to guarantee that the service is universally available at an affordable price.

This Communication does not attempt at this stage to identify telecommunications services which should be considered in the future for inclusion in universal service, but rather it points to the general areas where work is already underway in the context of preparing the information society. At the same time, the existing framework already requires Member States to set targets for the Community-wide introduction of certain advanced telephone facilities[36] (which are not currently part of universal service) and this will remain an important element in the Community approach.

As mentioned in Section II above, the Commission will carry out a comprehensive review by **1 January 1998** of the scope, level, quality and affordability of universal service in the European Community and consider the need for adaptation of the scope of universal service at a European level, in the light of the prevailing conditions and taking account of the criteria outlined above.

Examples of the issues linked to the future evolution of universal service obligations which will be considered in the First Monitoring Report

In addition to assessing issues linked to the level and quality of the current universal service obligation, the Report will examine: (i) **technical indicators** of service levels (and whether cost burdens were associated with their provision), (ii) **evidence of particular social or economic need**, (iii) evolution of prices and relative affordability of services and (iv) developments in other parts of the World.

In relation to the first two issues, the report would consider, inter alia:

Technical indicators would include for each Member State:

- Level of household personal computer penetration and households with access to on-line services

- Level of network digitalisation
- Level of business, residential and local community ISDN penetration
- Level of penetration of tele-working
- Percentage of schools, hospitals, libraries with access to on-line information services

Issues of particular social or economic need would include:

- Issues associated with educational and healthcare establishments
- Issues associated with less favoured and less populated regions
- Specific social needs of particular groups of users (such as users with disabilities)

Promoting the information society

In addition to the maintenance and development of universal service, public-private initiatives will play a major role in promoting the availability of new telecommunications services in the information society.

In the context of the information society, new inter-active services should be accessible to every citizen in the Community, so that the benefits of new technologies and services are felt in areas, such as **education and training**, **healthcare** and access to **public information**. This should in turn benefit the overall economic effectiveness of society. The principal role for telecommunications is to act as the highway over which many of these new services can be offered and competitive forces are stimulating the price reductions and innovation which are at the heart of the current revolution.

There was a widespread consensus within the public consultation that whilst universal service for telecommunications cannot be divorced from this broader political vision of the information society, that neither access to such services nor the services themselves should be included at this stage in the current concept of universal service.

Nevertheless the Commission has stressed the importance of education and training in the Information Society, notably in relation to equipping the workforce with appropriate skills for the information age with a view to fostering employment possibilities and overall competitiveness. The Commission has therefore committed itself to promoting access to and use of advanced communications and information services within the educational field. The provision of advanced telecommunications services, as well as improvements in service quality, prices and the speed of the network are all likely to result from a fully liberalised environment.

At the same time, consideration should be given to the extent to which these developments can be further promoted by regulatory or other action. One specific issue may be whether schools, colleges and universities should be offered reduced prices for high speeds of network access or for the use of current or advanced telecommunications services. That in turns raises issues of the relationship between universal service for telecommunications and broader policy objectives in the educational area, and of how such discounted tariffs might be funded, where they represent a financial burden for the operator providing them.

(For example, should they be funded directly by the State as part of its education budget; through the mechanism set up for funding universal service for telecommunications; or through other mechanisms?).

Such issues will be further considered in the forthcoming Communication on *the Citizen and the Information Society*, and also more broadly in the light of the comprehensive review of universal service for telecommunications in 1998.

Generally, however, new and advanced telecommunications and information services are appearing primarily in response to market forces and user demand. The role of the Community, public authorities and other public institutions is, on the one hand, that of catalyst, and, on the other, to ensure a regulatory climate which is favourable to innovation.

Action flowing from the recent legislation in the United States has been highlighted above. In Europe, a range of initiatives are underway, aimed at stimulating public-private partnerships and strengthening awareness and demand. This reflects priorities established in the Communication "Towards the Information Society", COM(95) 244[37].

That Communication emphasised that the Community's role focused on (i) *stimulation of projects* (through provision of information and increasing awareness of information society initiatives; through brokering partnerships between actors in different sectors and between public and private sector organisations, and providing guidance on available finance) and (ii) *the provision of financial support for certain projects by the Community* which either cater for the relevant infrastructure and the development of awareness, skills or services (through funding via the trans-European networks framework; the Community structural and cohesion funds; the European Investment Bank and the European Investment Fund and through Community programmes dedicated to education and training, such as the SOCRATES and LEONARDO programmes), or which stimulate the necessary research and development activities, leading to new concepts, prototypes or services which are key to the advancement of the Information Society (through the RTD Framework Programme, and, in particular through the Advanced Communication Technologies (ACTS) programme).

Public access to information society services

The Commission through these measures is supporting the extension of "public access" to the information society. This involves the connection of schools, colleges, hospitals, public offices, libraries and other public access points into the information society[38].

The Commission will explore ways of better co-ordinating the various on-going initiatives at a national level to enhance the impact on everyday life in *Communication on the Information Society and the Citizen* mentioned above.

Public and "community" access may be of particular importance in less favoured regions, where there may be a risk of delay in accessing advanced telecommunications services if left to market forces alone. The Commission, in the framework of the Monitoring Report before 1 January 1998, will closely monitor developments, as public access may be a means, within a reasonable time scale, of overcoming the difficulties in providing access to many advanced services and sources of information for individuals and for the non-profit and voluntary sectors. These are groups which may otherwise be excluded because of the high-cost initial investments required in terminals, computers and network connections).

The Commission will keep the actual progress made in extending public access under review, both in the less favoured regions and in the Community as whole, in order to assess periodically the need for additional action or for any reshaping of the concept of universal service at a European level.

Issues for further consideration

A range of factors must be taken into account in the developing framework for the information society.

- Low tariffs for use of the network are essential to the widespread take up of on-line information and services.

- Many information society services will be provided without regulatory intervention.

- Action may be needed to ensure that public institutions can access these new services.

- Initiatives, in particular, stimulating public-private partnership, should continue to promote the availability and take up of new information society services, especially, with regard to their development and broader take up amongst residential users.

- "Public access" should go beyond promoting physical connections to include adequate training, support and investment in equipment.

Some of these issues such as the needs for low tariffs, are closely linked to the current framework for universal service; others, extend far beyond telecommunications to touch on policies for education, healthcare and training.

The integration of a policy on universal service into the broader development of the information society is a matter for further consideration. This process will be helped by the Review announced in this Communication for 1998 of the scope, level and quality of universal service in the Community. In this respect, a Council Resolution is being examined on the use of multimedia technologies and services for educational purposes. The definition of future policy on universal service will also take account of the outcome of on-going and future debates, in particular, in relation to the White Paper on "Teaching and Learning : towards the learning society" *in the context of the* European Year of Lifelong Learning 1996, and the forthcoming Green Paper on the *Social Aspects of the Information Society.*

V CONCLUSIONS

This Communication has identified universal service as an essential element of the information society, but it is only one of several factors which are allowing Europe's citizens to enter into a new and exciting age of information. In order to accelerate and support the process of transformation, three sets of conclusions can be drawn:

1 **The current concept of Universal Service** forms a firm anchor for the regulatory reforms underway at a national level to achieve the full liberalisation of the telecommunications sector in Europe.

- The current concept of universal service corresponds to **the obligation to provide access to the public telephone network and to deliver and affordable telephone service to all users reasonably requesting it**. The detailed elements comprising that service are defined in the Voice Telephony Directive and are sufficient for the drafting of national schemes for universal service according to the Full Competition Directive.

- A **framework for the costing and funding of universal service** is found in the Interconnection Directive and the 'Full Competition Directive. Common principles are proposed to identify how much universal service obligations cost. These costs may be shared with other market players either (i) via a universal service fund at a national level or (ii) by direct payments to those providing universal service. Guidelines to be used in assessing national approaches to costing and funding are in preparation.

- Where additional telecommunications-related obligations outside the scope of universal service are imposed by Member States, any additional financial burden associated meeting such obligations must not funded out the mechanism established for funding universal service..

2. Universal service in the Community can and should be strengthened In the short term:

   - **Affordability is at the heart of the framework for universal service** for telecommunications. The **requirement for affordability must be made clearer**. At the same time, Member States should ensure that **appropriate measures are taken, (e.g. price caps, targeted tariff schemes) necessary to maintain the affordability of services for all users**, particularly in the run up to full competition. The Monitoring Report announced for 1 January 1998 will include an assessment of developments in pricing and the relative affordability of telecommunications services within the Community.

   - For users in the rural or remote areas, **price increases, other than adjustments to achieve cost-orientation, must not be used to compensate losses in revenue resulting from price decreases elsewhere.** Furthermore, any **differences in pricing between high cost areas and low cost areas must not endanger the affordability of universal service**.

   - The definition of universal service will ensure that an equivalent level of service is offered to **users with disabilities** at an affordable price and Member States are encouraged to provide citizens with **improved access to computer networks and on-line services** (in terms of faster network access speeds);

   - The Commission will place greater **emphasis on quality of service** and **the level of affordability** at both a European and national level, (including on monitoring, enforcement and compensation when targets are not met); as well as providing a **stronger role for the consumer voice**, particularly, in defining standards, the level of affordability and the future scope of universal service.

- **The Commission will encourage action in the less favoured regions to accelerate the process of network digitalisation** there. Developments will be carefully monitored to ensure that citizens in such regions benefit from the arrival of competition and the **Commission will continue to work to ensure that a combination of liberalisation and new technologies reduces rather than widens existing regional differences** within the European Community.

3. **Universal service is an evolving and dynamic concept** and will play an important role in the meeting the challenges of the information society: The Commission will report by 1 January 1998 on the scope, level, quality and affordability of universal service in the Community and consider the need, in the light of the prevailing circumstances, for adaptation of the scope of universal service at a European level, bearing in mind the need for predicatability for investment decisions.

   - Any extension of the current concept of universal service must combine a **market-based analysis of demand** for **and availability** of the service with a political assessment of its **social and economic desirability.**

     Public-private initiatives will play a major role in promoting the availability of new telecommunications services in the information society, particularly in the less favoured regions of the Community.

   - **Public access is an important means of bringing the information society to every citizen.** Progress in extending such access will be kept under review to assess periodically the need for additional action or for any reshaping of the concept of universal service.

   - The information society raises issues far beyond universal service for telecommunications. An overall Community policy for **the information society must integrate aspects of education, healthcare and social policy.**

ENDNOTES

1 See Commission Directive [../../EC] amending Commission Directive 90/388/EEC regarding the implementation of full competition in telecommunications markets ("the Full Competition Directive").

2 Directive 95/62/EC on the application of Open network provision (ONP) to voice telephony ("the Voice Telephony Directive"), OJ L321, 30.12.95

3 Commission Communication on the consultation on the Review of the situation in the Telecommunications Services Sector, COM(93) 159

4 Council Resolution 94/C48 of 8 February 1994 on Universal Service principles in the telecommunications sector, OJ C48, 16.2.1994 and Council Resolution 95/C258 of 18 September 1995 on the implementation of the future regulatory framework for telecommunications, OJ C258, 3.10.95

5 European Parliament Resolution of 19 May 1995 on the Green Paper on the liberalisation of telecommunications infrastructure and cable television networks - Part II A4-0111/95; OJ C151, 19.6.95

6 Opinion of the Economic and Social Committee of 13 September 1995 on the Green Paper on the liberalisation of telecommunications infrastructure and cable television networks - Part II, OJ C301, 13.11.95

7 Opinion of the Committee of the Regions on the Commission Communication: Europe's way to the information society. An action plan (COM((94) 347 final). CdR 21/95 ESP/ET/AG/ym and CdR 21/95 Appendix D/BAN/JKB/NF/as.

8 A detailed questionnaire was completed by Member States on the level and quality of telephone services in their territory. The results of the Member State questionnaire are set out in Annex 2. More than 100 organisations attended a public hearing in October in Brussels and more than 60 written comments were received in response to a Theme Paper sent out to more than 400 organisations. A list of participants and a summary of the main issues raised is set out in Annexes 3 and 4.

9 See the detailed description on the current level of service in Member States in Annex 2

10 Article 129a EC Treaty

11 See Proposal for a European Parliament and Council Directive on interconnection in telecommunications ensuring universal service and interoperability through the application of the principles of open network provision (ONP), COM(95) 379, 19.7.95 ("the Interconnection Directive") and the Full Competition Directive. These set out in particular the principles to be used in working out the cost of providing universal service and the systems (either a universal service fund or a system of supplementary charges) which can be used to share out any costs involved.

12 The Interconnection Directive sets out a technical description of the type of connection over which services are provided. It specifies that only the provision of the public fixed telecommunications network is part of universal service. Universal service does not mean that users have a right to a mobile telephone, although wireless technology represents an important way of delivering universal service in remote regions (for example by using a radio-link to connect a fixed telephone in a remote home or farm, instead of having to provide a fixed telephone line.

13 Member States are required to implement the obligations set out in the Voice Telephony Directive by 13 December 1996.

14 Monthly subscriptions with on-line service providers are generally in the region of 4 - 15 ECU. The trend towards telecommunications organisations offering cheap Internet access to subscribers is likely to develop in Europe, lowering further the cost of accessing certain inter-active services.

15 The Interconnection Directive requires Member States to introduce number portability in all major population centres by 2003 at the latest. For a description of these other services see the glossary with Table A6 in Annex 2.

16 See the Interconnection Directive and the Full Competition Directive.

17 According to the Full Competition Directive these schemes must be sent to the Commission by 1 January 1997 and will be assessed to ensure, in particular, that the obligations proposed are non-discriminatory; proportional, transparent (i.e. clearly formulated so that applicants know the extent of their obligations in advance); based on objective criteria (allowing judicial review in the case of conflict) and imposed only on those undertakings foreseen by the Community framework.

18 Council Directive 92/44/EEC of 5 June 1992 on the application of open network provision to leased lines, OJ L165, 19.6.92

19 Council Recommendation 92/383/EEC of 5 June 1992 on the provision of harmonised integrated services digital network (ISDN) access arrangements and a minimum set of ISDN offerings in accordance with open network provision (ONP) principles, OJ L200, 18.7.92

20 See the Voice Telephony and Leased Lines Directives. In a monopoly environment operators enjoyed considerable freedom in setting their prices which tended to lead to substantial profits being made on international and long-distance calls. Prices were not constrained by competitors who could otherwise have charged their customers lower prices. In the absence of competition, the regulatory framework in the Community has obliged certain tariffs to be cost-oriented in the run up to effective competition.

21 Indications of the level of rebalancing between 1990 and 1995 are set out in Tables A8 and A9 in Annex 2

22 The requirement for cost-orientation is a central element in the principles governing tariffs for telecommunications services in the European Community (see the 1990 Open Network Provision Framework Directive (90/387/EEC) and the subsequent ONP directives on Leased Lines and Voice Telephony).
The Full Competition Directive in Recital 17 calls for Member States to "*phase out as rapidly as possible all unjustified restrictions on tariff rebalancing by telecommunications organisations and in particular those preventing the adaptation of rates which are not in line with costs and which increase the burden of universal service provision*". Article 4C of the Full Competition Directive provides that where such rebalancing cannot be completed before 1 January 1998 the Member States concerned shall report to the Commission on the future phasing out of the remaining tariff imbalances and that such a report shall include a detailed timetable.

23 Targeted tariffs schemes designed, for example for low users, the elderly, or those on low incomes, can combine a low initial connection charge, low monthly rental and a limited number of free or cheap call units each month.

24 Price caps operate by pegging annual price rises either for the whole telephone service or for specific components, (such as rental for residential users) at or below the rate of inflation. This can lead to real reductions in prices for users, whilst encouraging the operator to improve its efficiency.

25 In reality, lower prices in a competitive environment are likely to stimulate telecommunications traffic lessening the overall impact of price competition on the total revenue of such operators.

26 See Commission Communication on the consultation of the Green Paper on the liberalisation of telecommunications infrastructure and cable television networks, COM(95) 158, 3.5.95 and Council Resolution 95/C258 of 18 September on the implementation of the future regulatory framework for telecommunications, OJ C258, 3.110.95

27 Estimates of the cost of universal service prepared for the Infrastructure Green Paper suggested a cost associated with universal service of between **1 to 2%** of total turnover for most of the 12 Member States at that time. The figures for Ireland and Italy were around 3%, Spain around 6%, Portugal 7% and Greece 15%. It should be emphasised that these figures were estimates prepared without full details of the underlying cost structures. More comprehensive

studies are currently underway in almost every Member State. Initial indications point to figures well within the ranges suggested in the Infrastructure Green Paper.

28 Article 32 of that Directive already requires the Commission to propose a revision of the directive in good time to allow the European parliament to decide on it by 1 January 1998.

29 Affordability will be assisted by the provision of free itemised billing on request and availability of selective call barring. Users should also be able to spread the costs of initial connection and operators should replace disproportionate or discriminatory deposit schemes with more proportionate means of credit control (such as pre-agreed credit limits).

30 Examples of action to achieve this are itemised billing and giving all customer the possibility of call-barring.

31 This requires completion by Member States of the on-going deployment of "touchtone" dialling in their networks

32 An important element of quality of service at a national level is enforcement of quality of service targets and the existence of rights of redress for users and appropriate compensation mechanisms.

33 This requires the provision of networks with the necessary transmission quality to allow users to access data communications services at commonly available speeds.

34 The approach in the US envisages , in particular, a compensation mechanism to meet burdens associated with the provision of preferential tariffs offered to schools and libraries, though much of the detail still has to be worked out. A private foundation, *The National Education Technology Funding Corporation* aimed at promoting the financing and development of additional services is also being set up to attract private funding into the sector.

35 In the United States four criteria have been identified against which possible candidates for universal service would be assessed: "*(A) essential to education, public health or public safety, (B) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers; (C) are being deployed in public telecommunications networks by telecommunications carriers; and (D) are consistent with the public interest, convenience and necessity*". These criteria highlight the mixture of universal service objectives and broader policy objectives linked to education or healthcare found in the draft legislation.

36 The Voice Telephony Directive lists of these services. Table A6 in Annex 2 shows the extent to which some of these are already available in the EC.

37 Communication of 31 May 1995 on a methodology for the implementation of information society applications and proposal for a European Parliament and Council Decision on a series of guidelines for trans-European telecommunications networks, COM(95) 224. The Communication identified a diverse range of projects related to applications, generic services and basic networks.

38 The issue of public access has been addressed in "*Building the European Information Society for us all" Interim Report of the High Level Expert Group on social and societal aspects of the information society.* It is also being tackled in the on-going work of the Information Society Forum. The goal of connecting schools, hospitals and libraries is already being explored in some Member States and underpins the developing approach in the United States.

ANNEX 1 : TIMETABLE FOR ACTION IN THE SHORT TERM (1996-1998)

Date	Action
Before 30 June 1996	Proposal for a European Parliament and Council Directive amending the Voice Telephony Directive. Member States commence drafting authorisation schemes for voice telephony and public network providers as provided by the Full Competition Directive Member States concerned apply for derogations to the 1998 deadline and provide all necessary economic data necessary for the assessment of the justification of such derogation as provided by the Full Competition Directive Common Position on the ONP Interconnection Directive (including principles for the costing and funding of universal service). Common Position on the proposed European Parliament and Council directive on a common framework for general authorisations and individual licenses in the European Community.
Before 30 September 1996	Communication on the Commission criteria for costing and funding of the universal telephone service in the EC
Before 31 December 1996	Common position on the proposal for a Council and European Parliament Directive amending the Voice Telephony Directive. Adoption of the ONP Interconnection Directive. Adoption of the Licensing Directive. Communication by the Member States of authorisation schemes for voice telephony and provision of public telecommunications networks including obligations related to universal service
Before 30 June 1997	Decisions of the Commission on the authorisation schemes submitted. Publication in the Member States of information required by the Full Competition Directive with regard to licensing procedures and terms and conditions for interconnection. Adoption of the proposal for a Council and European Parliament Directive amending the Voice Telephony Directive.
Before 1 January 1998	Full liberalisation of telecommunications services and networks, subject to possible transitional arrangements for certain Member States, where justified and subject to scrutiny. First Commission Report on the monitoring of the scope, level, quality and affordability of the universal telephone service in the Community.

ANNEX 2 : UNIVERSAL SERVICE FOR TELECOMMUNICATIONS IN THE EUROPEAN COMMUNITY TODAY

This Annex presents the results of survey of the level of service currently found in the European Community. It addresses five areas :

(I) General developments in the provision of telecommunications services;

(II) Quantitative indications service penetration;

(III) Qualitative indications of service quality

(IV) the availability of advanced telephone services and

(V) the level of tariff changes and the existence of special or targeted tariff schemes.

The information is based primarily on the responses of the Member States to a questionnaire sent out by the Commission in Summer 1995. A copy of that questionnaire is provided at the end of this Annex.

I GENERAL DEVELOPMENTS IN THE PROVISION OF TELECOMMUNICATIONS SERVICE

In the last decade, a number of technical and service developments have had a considerable impact on the nature of the basic telephone service.

1. The development of relatively inexpensive fax machines and modems means that ordinary telephone lines are being used to an ever increasing extent to communicate data and images as well as voice, although at a relatively slow speed.

2. The digitalisation of the telephone network combined with improved signalling means that a range of supplementary telephone services are being offered on the basic telephone line. These services include call-forwarding, call transfer and call-waiting, voice-mail and services which allow the identification of the calling-party ("calling line identification"). These add-on services have the potential to generate significant revenues for telecommunications operators. In addition, it is now far easier to provide more sophisticated billing details to customers including itemised billing.

3. Although many of the above-mentioned services are not yet extensively provided or marketed by all telecommunications operators, particularly to residential customers, most operators offer ISDN (integrated services digital network) service and some are planning to offer an ISDN connection at the same price as an analogue link in certain areas. ISDN is beginning to be used for applications where users require additional functionality. Examples include desk-top video-conferencing or data transfer, as an alternative to or back-up for leased lines, and for Group 4 or higher speed fax.

4. There has been a dramatic growth in wireless telephony and in particular mobile cellular networks and subscribers. 5 per cent of telephone subscribers in the European Community are currently based on mobile networks[1]. Wireless-based telecommunications now demonstrates some significant operational and cost advantages over wire-based telecommunications for certain types of usage. In particular, providing a wireless connection to

customers in remote or scarcely populated areas is considerably cheaper than the installation of a fixed line. Wireless applications in the local loop are also being seen, particularly in central and eastern Europe, as one means of rapidly upgrading the network and meeting unsatisfied demand for telephone service or for introducing competition into the local loop. Examples include the use of wireless telephony solutions to deliver rural service in Spain[2] and Germany, whilst Digital European Cordless Telephone (DECT) technology is being used for local loop competition in Finland).

5. Satellite communications have not yet fulfilled their earlier promise in relation to the delivery of a universal telephone service, as until recently regulatory and technical constraints existed which combined to inhibit growth. However, the new regulatory environment, together with the emergence of satellite personal communications services may develop further the role of satellite based communications in connecting the remoter regions within the Community and in order to support this the Commission has proposed a framework for the co-ordinated selection and licensing of satellite-based personal communications systems[3]. There is also scope for making temporary use of VSATs[4] to serve isolated areas pending roll-out of a more permanent terrestrial infrastructure.

6. The process of deregulation is increasingly allowing full advantage to be taken of developments in hybrid fixed networks (using fibre and then coaxial cable and/or copper for part of the local network) which support the joint provision of telephone service with cable television service, where new franchises have been awarded and the regulatory situation has permitted. The use of such technologies, combined with the advent of ISDN / broadband networks and digital compression technologies, has the potential to rewrite the economics of delivering universal service, whilst the falling cost of transmission should lead to tariff structures which are less dependent on distance and on the duration of the call. In such an environment, the combined offering of telephone, information and entertainment services once effective competition is established, may allow operators to price the telephony elements at a lower level reflecting the more efficient use of their networks and the dual source of revenue.

II. QUANTITATIVE INDICATORS OF THE LEVEL OF TELECOMMUNICATIONS SERVICES

The quality and level of telecommunications services in the European Union has shown a steady and significant improvement over the last five years. This is reflected in the detailed responses to the questionnaire completed by Member States and in many of the comments made in response to the Theme Paper. A number of features of the current environment should be highlighted.

1. Overall, there have been important improvements in the Community in the number of households with a telephone (see Table A1). Whilst household penetration in France, the Netherlands and Scandinavia was already well above 90% in 1990 and has improved since then, even more impressive growth has been seen elsewhere. In 1990 only 66% homes in Ireland, whilst today its 80% and for Portugal the level has risen in the same period from 47.1% to 74.8%. However, it is notable that at least five national regulatory authorities even today do not have publicly available data on this basic measure of universal service. Furthermore, where data has been provided, it is not directly comparable between Member States.

2. The average number for the EC of residential main lines per hundred homes (see Table A1), has also seen a substantial rise from 87 to 96 lines per household. These figures provide a more comparable measure of the situation between Member States, do not distinguish between those homes/individuals with more than one telephone line (e.g. business and/or fax line and residential line) and those with no telephone. This results in Denmark, France, Luxembourg, Finland and Sweden all have a residential main line penetration in excess of 100%.

Table A1 Telephone penetration rates within the European Community

Country	Percentage of households with a telephone[1]		Residential Main Lines per 100 Households[2]	
	1990	1994	1990	1994
B	n/a	n/a	81	92
DK[3]	94.3	n/a	103	106
D[4]	80	89	81	93
EL	n/a	n/a	80	96
E	n/a	n/a	80	89
F	94	96.4	104	111
IRL	66	80	60	75
I	n/a	n/a	90	99
L	n/a	n/a	88	105
NL	93	96.5	96	96
AUT	n/a	n/a	n/a	n/a
P[5]	47.1	74.8	43	64
FIN	95[6]	97[6]	103	104
SWED[7]	98.7	98.7	121	121
UK	88	91.1[8]	89	99
EC Average	-	-	87	96

Source: National Regulatory Authorities (1995).

n/a indicates that the NRA does not have this data available. EC average excludes Austria.

Notes

1. All data provided in this section of the table relates to the most recent period for which information is available (normally 1994). Where available, additional data is given in these notes.
2. This indicator of residential telephone penetration is imperfect as it is not the same as the number of households which have a telephone; the latter indicator would have an upper value of 100.
3. Source: Tele Danmark.
4. Figure includes the new Bundesländer.
5. Figures refers to penetration rate for Portuguese mainland (excluding Madeira and the Azores). The household penetration figure in 1994 including those islands was 74.8%.
6. Estimated figures for 1990 and 1995
7. % relates to 1989 which was the last year for which figures were calculated, given the very high level of penetration achieved
8. Data relates to March 1995 (Source: UK Family expenditure survey).

3. The general growth in service penetration extends to most other areas : total main lines (business and residential); mobile subscribers and in the provision of public payphones. (see Table A2) For public payphones, the EC average has increased from **2.9** to **3.1** per 1000 population, with the percentage at a national level either staying the same or increasing, with the sole exception of Italy (where penetration was already the highest within the EC).

Table A2 - Penetration of fixed and cellular telephones per 100 population and payphones per 1000 population in the EC

	Main Lines		Cellular subscribers		Payphones	
Country	per 100		per 100		per 1000	
	1990	1994	1990	1994	1990	1994
B	39	45	0	0.7	1.3	1.5
DK	57	60	2.9	9.7	1.3	1.6
D	40	48	0.4	3.0	1.7	2.1
EL	39	48	0	1.4	2.1	3.5
E	32	38	0.1	1.0	1.1	1.4
F	50	55	0.5	1.4	3.2	3.5
IRL	28	35	0.4	1.7	1.5	1.8
I	39	43	0.5	3.9	7.7	6.8
L	48	55	0.2	3.2	0.8	0.9
NL	46	51	0.5	2.0	0.5	0.7
AUT	42	47	0.5	3.5	4.3	4.3
P	24	35	0.1	1.8	2.6	3.3
FIN	54	55	5.2	13.3	4.1	4.6
SWED	68	68	5.6	16.0	4.3	3.7
UK	45	49	2.1	6.1	1.6	2.1
EC Average	**43**	**49**	**0.9**	**3.6**	**2.9**	**3.1**

Source: National Regulatory Authorities; (1995)

III QUALITATIVE INDICATORS OF THE LEVEL OF TELECOMMUNICATIONS SERVICES

1. Alongside improvements in overall numbers, almost every Member State now sets, monitors and publishes results in relation to quality of service targets. This practice has now been reinforced by the requirements of the Voice Telephony Directive (see below). These indicators, which are generally, set in a manner to require annual improvements in the level of service, provide users with information about what they are entitled to expect and as such they are a crucial element of universal service.

   At the same time, the results of the questionnaire have indicated the considerable divergence between the standards set and/or achieved in different parts of the Community, and show the difficulty in comparing the position in each Member State. The results are summarised below:

2. **Length of time for installation of a telephone (see Table A3).**

   Targets are set in almost all Member States for installation times with most of them also publishing some information on the supply times achieved. The average length of time to obtain a telephone in 1995 in the Member States varied from 1 day in Sweden to 45 days in Austria and 220 days in Greece. Operators in most Member States complete a high proportion (60-80%) of installations within 5 to 20 days.

Table A.3 Target periods for network connection and supply times achieved in the EC[1]

	Information Published	Target	Actual supply time
B	Yes	90% within 20 working days[2]	90.9% within 20 working days 61.3% within 5 working days[3]
DK	Yes	95% on installation date agreed upon with customer. Remaining 5% within 10 days.	98% within target
D	Yes	80% within 20 working days	87.1% within 20 working days in Western Länder 42.3% within 20 working days in Eastern Länder 98.3% of lines provided on date agreed with user[4]
EL	n/a	80% of new connections within 30 days[5]	220 days on average[6]
E	No[7]	n/a	5 working days on average
F	Yes	Within 5 working days[8]	8 days on average[9]
IRL	Occasionally[10]	n/a	11 working days on average 75% of customer orders completed within 2 weeks[11]
I	n/a	For new connections: 60 days For take-overs: 30 days	97.8% of connections within targets
L	n/a	n/a	60% within 30 days 89% within 3 months 11% over 3 months
NL	n/a	1 month	96% within target
AUT	n/a	n/a	45 days on average
P	Yes	Target: 2 months (95)/1.5 m(96)/1 m(97)[12] Minimum level : 2.8/2.4/2 months	0.4 months average (Sept 95)
FIN	Yes	n/a	5.4 days on average[13]
SWED	n/a	Within 5 days[14]	Less than 1 day on average
UK	Statistics published regularly by *BT* and *Mercury* only	*BT*: For residential customers: within 8 working days. For business customers: within 6 working days *Mercury*: Access for indirectly connected customers: within 2 days of order[16]	*BT*: For residential 85.3% satisfied target For business customers 76.4% satisfied target[15] *Mercury*: 72.8% of connections on date agreed[17]

n/a=data not available

Source: National Regulatory Authorities (1995).

NOTES

1 All data provided in the table relates to the most recent period for which information is available (normally 1994). Where available, additional data is given in these notes.

2 Target set in Belgacom's Management Contract. The target set for 1995 is 80% of connections within 5 working days.

3 In 1993: 26.6% within 5 working days and 83.9% within 20 working days.

4 These figures relate to the second half of 1994. In first half of 1994 83% of lines provided within 20 days in Western Länder.

5 Target set for 1995

6 Data relates to 31.12.94

7 Information provided to the Spanish Advisory Telecommunications Council. Public can obtain information given to that body.

8 Target set in France Télécom's contract with the Direction Générale de Postes et Télécommunications (DGPT Annual Report (1994)).

9 Figure as at 31 December 1993 (Source: DGPT Annual Report (1994)).

10 The last set of information was published on 21 March 1994.

11 In 1993: 19 days on average.

12 Target and minimum acceptable level set in contract between ICP and Portugal Telecom and covers period 1995/1996/1997

13 In 1993: 5.3 days on average; in 1992: 5.5 days on average

14 Target forms part of Telia's service warranty.

15 In addition to requesting a direct connection to the Mercury Network, users can access Mercury's long-distance/international network indirectly via BT or other local connection. Access is obtained by dialling a specific preface (132) after subscribing to Mercury.

16 Figures relate to October 1994 to March 1995. For April 1995 to September 1995, corresponding figures are 86.9% and 78%.

17 Mercury completed on average 82.5% of connections on date agreed with the customer in 1993.

3 Fault repair time (see Table A4)

Targets are used in all Member States, and are generally set for % of repairs within one working day and achievement of targets generally in the range of 85-95%. Additionally, operators in twelve Member States currently offer compensation to customers, where certain repair targets are not met.

Table A4 : Target periods for fault repairs, repair times achieved and compensation schemes available in the EC[1]

Country	Fault repair times		Compensation
	Target[2]	Actual repair time	Schemes
B	71% before end of next working day[3]	81.3% of repairs within targets	n/a
DK	100% within 12 working hours	91% within target.	If Tele Danmark defaults on the time of execution concerning the change of an existing connection to the public telecommunications network, or if faults occur in the telecommunications network leading to interruptions of the connection, Tele Danmark shall make a proportional reduction in the subscription charge for the period in question, provided that the amount exceeds DKK 25. The amount shall be deducted on the subsequent invoice for subscription charges.
D	80% within 3 working days	82.5% of repairs within target	Graduated system of discounts (up to a full 100% discount) for network connection delays and compensation schemes for network connection and fault repair delays depending on nature of service and length of delay[4]
EL	60% within 24 hours[5]	57% within target	Basic charge reimbursed if repair time target not satisfied
E	Within 6 days[6]	98.4% of faults attended to within 24 hours	Reimbursement of a proportionate part of the monthly line rental for repairs exceeding repair time target
F	92% before end of next working day[7]	86.3% of repairs within target[8]	n/a
IRL	n/a	90% within 2 days[9]	No schemes in operation
I	n/a	67.3% same day 97.1% within 2 days	n/a
L	Within 5 days[6]	86.2% same day 100 % within 10 days	Rental charge reimbursed if repair time target not fulfilled
NL	Within 12 working hours	98% of repairs within target	Twice the monthly rental will be reimbursed if repair targets not met
AUT	Within 1 day[6]	93% within 24 hours	Reimbursement of 1/30 of monthly line rental for every day of delay to line repair in excess of repair time target
P[10]	Objective : within 2 working days 83%(95)/ 85%(96)/ 90%(97) Minimum level: 75%/80%/85%	92% within 2 working days(September 1995)	Reimbursement of the monthly subscription corresponding to the number of days for which service was interrupted

FIN	n/a	66.4% within 24 hours[11]	There is a reimbursement of a monthly basic fee if the line is out of order for more than 48 hours within one month.
SWED	Within 1 working day[12]	93% of repairs within target	Discount of quarterly fee if new connection not within 5 days or if fault not repaired within repair time target
UK	*BT*: by end of next working day[6] Special services guaranteeing a quick response are offered at an extra fee *Mercury*: For 2100 service, within 24 hours; for indirect service, 90% of faults within 24 hours	98.9% of business customer faults 95.2% of residential customer faults repaired within 2 working days[13] 68.3% within 4 hours 94.1% within 48 hours	Compensation available for various service failings either on the basis of a daily rate or actual financial loss, up to maximum of £1000[14] Compensation available for late delivery of service depending on nature of service and length of delay, up to maximum of £5000

n/a: data not available

Source: National Regulatory Authorities (1995)

NOTES

1 All data provided in this table relates to the most recent period for which information is available (normally 1994). Where available, additional data is given in these notes.

2 Where possible and where no specific target has been provided repair time targets have been adduced from time limits used in the corresponding compensation scheme for the purposes of determining entitlement to compensation. See footnote 6 below.

3 Target set for 1994 by management contract between Belgacom and the Belgian Government. The target has been set at 76% for 1995.

4 For example, a network connection delay of up to 10 working days will entitle the subscriber to a discount of up to 30% on the connection fee and a delay of over 2 working days in repairs to basic telephone services entitles the subscriber to 50DM.

5 The Special Circular of 24 July 1995 amending the Greek Telephone Regulation imposed a target of 5 working days for 1995 and of 3 working days for 1996.

6 Target adduced from time limits adopted in compensation scheme for purposes of determining entitlement to compensation.

7 Target set in France Télécom's general contract with the Direction Générale de Postes et Télécommunications (Source: DGPT Annual Report (1994)).

8 Figure as at 31 December 1993 (Source: DGPT Annual Report (1994)).

9 This figure relates to customer reported faults. With regard to line faults 88% are repaired within 2 days.

10 Target and minimum acceptable level set in contract between ICP and Portugal Telecom and covers period 1995/1996/1997 . Compensation available after 3 days without if fault is operators responsibility and after 10 days without service if *force majeure*.

11 In 1993, 73.5% of faults were repaired within 24 hours.

12 Target forms part of Telia's service warranty.

13 Figures relate to period April to September 1994. In the same period, 87.6% of business and 75.5% of residential faults were repaired within 5 working hours or 9 working hours respectively or on a date agreed with the customer.

14 On the daily rate basis, the customer is entitled to claim one month's rental for each day of delay.

4 Percentage of public payphones in working order (see Table A5)

Payphones have a particular role in compensating for the lack of telephone penetration, especially in rural areas. For those Member States where data is available, a very high proportion of those payphones were in working order (between 92 and 98%). Nevertheless, National Regulatory Authorities in 6 Member States were unable to provide data on the percentage of public payphones in working order.

Table A5 Average percentage of public payphones in working order in Member States in 1994[1]

B	DK	D	EL	E	F	IRL	I	L	NL	AUT	P	FIN	SWED	UK
n/a	92[2] 97[3]	n/a	95	n/a [4]	n/a [5]	Over 93	n/a	Over 97	95	97	99.9	n/a	+/- 98	94.6[6]

n/a: data not available

Source: National Regulatory Authorities (1995).

NOTES

1 All data provided in the table relates to the most recent period for which information is available (normally 1994). Where available, additional data is given in these notes.

2 Coin operated payphones.

3 Card operated payphones.

4 The average repair time in public telephones of all types (that is in public and private places) is 2.8 hours; for public telephone boxes it is 10.6 hours.

5 France Télécom's general contract with the Direction Générale de Postes et Télécommunications stipulates that only 5% of public payphones should remain out of order for more than 24 hours. As at 31 December 1993 4.8% remained out of order for a longer period (Source: DGPT Annual Report (1994)).

6 This figure relates to BT public payphones for the period October 1994 to March 1995. For the preceding 6 month period the figure was 95.9%.

5. Supply time and quality of service indicators required by Annex II of the ONP Voice Telephony Directive

According to the Voice Telephony Directive[5], Member States will be required from the end of 1996 to set and publish targets for supply times and quality of service indicators for those operators covered by the Directive, in respect of:

- Supply time for initial network connection
- Fault rate per connection, fault repair time and call failure rate
- Dial tone delay and call set up delay,
- transmission quality statistics,
- Response times for operator services
- The proportion of coin and card-operated public pay-telephones in working order
- Billing accuracy

Results must be published annually and the Commission will publish in the Official Journal, where that information can be found at a national level. The choice of indicators in part reflects the work already undertaken within the OECD, ITU and ETSI[6].

IV AVAILABILITY OF ADVANCED TELEPHONE FACILITIES

1. An increasing range of advanced telephone features (see Table A6) are now currently commercially available or on trial throughout the Community, though the level of deployment is often linked to the extent of digitalisation of national networks.

- **Touchtone (DTMF) dialling** is available in all Member States (though sometimes confined to subscribers connected to a digital exchange).

- **Call waiting** and **call forwarding services** are also fairly widely available, whilst **calling line identification** is offered in 5 Member States, with operators in a further three Member States including in an ISDN offering, and plans for it to be offered or piloted in three more Member States in 1996.

- **Call barring facilities** are available in twelve Member States, (although in Austria, Belgium, Denmark, and Finland) this possibility is currently limited to certain value-added services).

- **Voice mail services** are available in 7 Member States, with trials underway in a further three Member States, and the facility being a common feature within the GSM network.

2. Three of these facilities (i.e. Touchtone Dialling / Call Forwarding / Calling Line Identification at a national level) are identified in the Voice Telephony Directive as elements of the telephone service which should be introduced according to nationally set dates. They are increasingly available in substantial parts of the network.

Call Waiting is a service which permits a subscriber to be notified (by a specific tone) of an incoming call while engaged in another call. The user then has the choice of accepting, rejecting or ignoring the waiting call.

Call Forwarding is a service which permits a served user to have the network send to another number all incoming calls for the served user's number. (This service should be distinguished from call forwarding when busy and call forwarding when no reply).

Call Transfer is a service which enables a user to transfer an established call to a third party. For the original call, the served user may have been either the calling or called party.

Calling Line Identification is a service which provides the calling party's number to the called party prior to the call being established. It may be possible that the calling party restricts the presentation of the calling party's number to the called party.

Dial-Tone Multi-Frequency (DTMF) operation / Touchtone Dialling means the facility offering users Touchtone dialling, which is essential for the use of many new interactive telephone services. This is defined in the ONP Voice Telephony Directive i.e. the fixed public telephone network supports the use of DTMF telephones for signalling to the exchange, using tones as defined in ITU-T Recommendation Q.23, and supports the same tones for end to end signalling through the network, both within a Member State and between Member States.

Integrated Services Digital Network (ISDN) is a network which allows, via a single access, using the existing subscriber line, the transmission of voice telephony, text, data and images.

Table A6 : Availability of Advanced Telephone Facilities in the EC

Country	Dual-tone Multi-Frequency (DTMF) Dialling	Call Waiting	Call Forward	Voice-mail in the public network	Calling Line Identification	Call Barring Facilities
B	Yes[1]	Yes[2]	Yes[2]	Yes	Yes[3]	Yes[4]
DK	Yes	Yes[5]	Yes[5]	Yes[5]	No[6]	Yes[7]
D	Yes	Yes	No[8]	Yes	Yes	Yes
EL	Yes[5]	Yes[5]	Yes[5]	No	No	No
E	Yes	Yes[9]	Yes[9]	No	No[10]	No
F	Yes	Yes	Yes	Yes	Yes	Yes
IRL	Yes[5]	Yes[5]	Yes[5]	Yes[5]	No	No
I	Yes[5]	Yes	Yes	No[11]	Yes[3]	Yes[12]
L	Yes	Yes	Yes	No	No	Yes[13]
NL	Yes	No[14]	Yes	No[11]	No[15]	Yes
AUT	Yes	Yes	Yes	Yes[16]	Yes[3]	Yes[17]
P	Yes[18]	Yes[18]	Yes[18]	Yes[16]	Yes	Yes[184]
FIN	Yes	Yes	Yes	Yes	Yes	Yes[19]
SWED	Yes	Yes	Yes	Yes	Yes	Yes
UK	Yes	Yes	Yes	No[11]	Yes	Yes

Source: National Regulatory Authorities (1995).

NOTES

1 For 93.5% of PSTN lines.
2 For 60% of PSTN lines.
3 Available on ISDN
4 Call barring available to block access to kiosk services.
5 Commercially availability linked to whether subscriber is connected to a digital exchange (percentage of subscribers for those States indicated in brackets) : DK (55%), EL (3%), IRL (75%) and Italy (67%)
6 Gradual introduction from February 1996.
7 Commercially available blocking access to specific value-added services; per line or per call barring of call facilities (such as call identification) will be introduced in December 1995.
8 Technical possibility on ISDN but this is not commercially available for the moment.
9 47.8% of the subscribers have the possibility to access this service.
10 There is a plan to offer such a service in 1996 for subscribers connected to digital switches.
11 Voice-mail was on trial in 1995.
12 Call barring facilities for trunk traffic and kiosk billing services.
13 Customers have the possibility of per line barring of call facilities.
14 Pilot in 1995 and introduction in 1996.
15 Pilot in 1995.
16 Available for mobile telephone (GSM).
17 Barring access available only to specific value-added services (not per line or call blocking facilities)
18 Available whenever it is technically feasible and for CLI, available on ISDN whenever it is technically feasible.
19 Customers are offered the possibility of per line barring of call facilities and barring access to specific value-added services.

V THE AFFORDABILITY OF TELECOMMUNICATIONS SERVICES IN THE EUROPEAN COMMUNITY TODAY

As indicated in the Communication, for the majority of users, it is the overall affordability of the telephone service which is important. It was also stressed in many of the comments received that users needed to be better informed about what they are spending and to be given more control over that expenditure. This is all the more important in an environment in which the general volume of telephone usage is increasing and in which there are an increasing number of new audiotex services, providing information or entertainment, often priced at a premium above the normal cost of universal service.

Price levels within the Community are already quite varied. Indications of these absolute levels are provided in Table A7.

Table A7 : Telephone Charges[1] for Residenial Users in the EC Member States (by fourth quarter 1995)

	Installation Charges[2] (New Connection)	Rental Charges[3] (Bi-monthly)
B	90	23
DK	212	27
D	46	23
GR	160	11
E	133	16
F	39	12
IRL	148	25
I	99	12
L	64	11
NL	93	22
A	90	24
P	77	19
SF	169	20
S	79	20
UK (BT)	117	17
UK (MCI)[4]	117	25

	3-minute Local Call		3-minute Trunk Call	
	Peak period	Cheap period[5]	Peak period	Cheap period[6]
B	0.10	0.03	0.58	0.23
DK	0.13	0.07	0.29	0.14
D	0.11	0.04	0.87	0.40
GR	0.10	0.10	0.98	0.65
E	0.07	0.07	1.00	0.42
F	0.09	0.03	0.81	0.28
IRL	0.12	0.02	0.67	0.46
I	0.13	0.09	0.92	0.34
L	0.08	0.04	0.08	0.04
NL	0.08	0.04	0.25	0.13
AU	0.15	0.15	1.21	0.90
P	0.06	0.02	1.17	0.59
SF	0.12	0.12	0.28	0.17
S	0.08	0.05	0.24	0.14
UK (BT)	0.12	0.05	0.30	0.18
UK (MCI)[7]	n/a	n/a	0.23	0.15

Notes

1. All charges in the tables are in ECU and include value added tax.
2. Charges are minimum charges excluding time and material charges which are levied in some Member States.
3. Rental charges reflect the price for a single line in the capital city. Germany includes free call minutes equal to ECU 2.42.
4. Mercury rental charge comprises the BT rental plus the charge for the authorization code.
5. The cheapest off-peak rates have been taken into consideration
6. Refer to note 5.
7. Mercury does not offer local calls for residential users.

Progress made in adjusting tariff structures with the Community and its impact on the overall affordability of universal service

1. Table A8 indicates the overall percentage change in the general level of the prices of telecommunications services in the Member States of the European Community between 1990 and 1995. (A detailed breakdown of the different elements within the overall change is provided in Table A8). The information set out is based on the data provided by national regulatory authorities and is calculated according to national practice. It is not therefore possible to compare price changes directly between different Member States, making it difficult to compare price changes in different parts of the Community.

   Additionally, Tables A7 and A8 show percentage changes and do not indicate the prices actually charged. It is not therefore possible to draw conclusions concerning the effects of these rises on the overall affordability of the services concerned.

   Nevertheless, the data shows that important changes in tariff structures are underway and, in particular, the general trend of increases in fixed elements in the tariffs for universal service (connection and rental), as well as higher charges for local calls at peak hours and, in most Member States, corresponding reductions in regional, long-distance and international calls.

2. Information on the current availability of targeted or special tariff schemes is set out in Table A-9.

Table A8: Average Overall Tariff Adjustments - (NRA Estimates) 1990 - 1995

Tariff changes indicated are change in real terms, with nominal changes, where available, shown in brackets

Detailed data on the changes for installation / rental / local / regional / national and international tariffs are set out in Table A8

	Overall % Change in tariffs (1990-1995)
B[1]	n/a
DK	+0.5
D[1]	n/a
EL[2]	- 43.2 *(-7.2 nominal change)*
E[1]	n/a
F[3]	- 14 *(- 3.4 nominal change)*
I	n/a
IRL	- 42 *(- 25 nominal change)*
L	n/a
NL[4]	+ 3.7 (Mandatory services) + 6.6(Small user tariff)
AUT[1]	n/a
P	- 10.2 (+ *27.6 nominal change)*
FIN	-5
SWED[5]	- 8 *(+ 8 nominal change)*
UK[6]	- 23.7 *(- 10.2 nominal change)*

n/a : Data not available. Source: National Regulatory Authorities (1995)

Notes on Table A8

1. Data provided for changes in individual tariff elements, but no overall figure available.
2. Average overall tariff change for call charges only
3. Period 1990 - 1994
4. Data provided indicates price change of an unspecified basket of services in relation to consumer price index.
5. Calculated on the basis of Telia's index of its tariff basket.
6. The global figures for the overall percentage change in BT's tariffs between 1990/91-1994/95 and relates to an overall weighted average of all the services in the price control basket, not just the ones listed in the table.

Information and control over what customers spend on telecommunications

3. Above indications were given about the increasing availability of call-barring facilities for residential users which can offer a degree of control, by allowing them to block calls to selected services (e.g. premium priced services), or potentially to long-distance and /or international calling.

4. Additionally, the Voice Telephony Directive requires from the end of 1996 Member States to set targets for the availability of itemised telephone bills - a service which is in any event increasingly common throughout the EC. This is an important means of providing users with sufficient information over what they have spent on the telephone. At the same time, a number of comments stressed that current long-billing periods made it difficult for some users to

control expenditure and that therefore warning should be given of excessive or unusual use of a particular telephone connection.

The use of special and targeted tariff schemes in the EC

As part of a general aim of ensuring affordability for telecommunications services, **special and targeted tariff schemes** are provided in all Member States (see Table A8 for full details) to improve the overall affordability of universal service for certain users, or for certain groups of users with specific needs or specific calling patterns. **Low user schemes** are available in France, Ireland, Sweden and the United Kingdom. Such schemes are particularly important in the context of tariff rebalancing as it is generally those users who make few calls, or few long-distance and international calls, who may be disadvantaged by the price changes resulting from rebalancing. In addition, **social schemes for those on low incomes** are available in Belgium, Germany, France, and Austria. All Member States, with the exception of Luxembourg, the Netherlands and Finland, also offer some form of **special tariff packages for elderly users and for users with disabilities**.

A number of organisations, particularly those representing the interests of users with disabilities, stressed in this context the need for such schemes to be available automatically to such users or, at least, that the administrative formalities connected with benefiting from such schemes should be reduced, (for example, to avoid the requirement to register separately for each scheme).

Table A9 : Tariff Changes within the EC between 1990 and 1995

Generally real % change is indicated (nominal change in brackets) : * indicates that figure is real change where no nominal figure is given

	Overall Change	Installation	Rental	Local	Regional	National	International
B[1]	n/a	Connection/ set up + 39% Existing line - 37%	+ 35% large areas +50% med. areas + 70% small areas	+ 7.6%	+5.8% (interzonal traffic conti-guous zones)	-5.8% (interzonal traffic non-contiguous zones)	Examples: France - 22.2%; Italy - 33.3%; Spain - 28.6%; USA - 40%; Japan - 55%;
DK	+0.5%	+ 8.3%	+ 3.5%	+ 8.5%	No change	- 20.6%	- 5%[2]
D[3]	n/a	- 15.4%*	- 15.4%*	- 15.4%*	n/a	- 55.4%* (>100km)	Examples: USA - 68.9%* Norway - 33.9%*
EL[4]	-43.2% (-7.2 in nominal terms)	+ 105.2%*	+ 68.1%*	+ 89.1%*	-	+ 68.6%*	- 1.6%*
E[5]	n/a	+ 2.38%	+ 24.2%	+ 192.3%	- 23.5%	+ 10.6%	Examples EC Calls - 23% USA - 61%
F[6]	- 14% (- 3.4% nominal change)	+ 30%[7] (+16%)	-	+ 25% (+ 11.5%)	- 29.5%[8] (- 37%)	- 19% (> 100km) (- 27.5%)	- 18.7% (-27.5%)[9]
I	n/a	n/a	Residential: + 42% Bus: No change	Peak : + 41% Bus: + 12%	-	Peak: - 11% Business - 6%	Examples: UK Peak - 20%; Cheap - 20% USA Peak - 43% Cheap - 48%
IRL	- 42% (-25% nominal change)	No change	No change	+ 10%	-	- 4.6[10]	UK: - 4.7% Other: - 4.7%
L[11]	n/a	No change	No change	See national	See national	Peak : -6% Other: -13.4%	1995 - 13 to 50%

	Overall Change	Installation	Rental	Local	Regional	National	International
NL[12]	Mandatory services + 3.7%* Small user tariff + 6.6%*	No change	16.7%	Av: + 22% Peak + 26% Cheap + 18%	Av: + 22% Peak: + 26% Chp: + 18%	-	- 21.3%
AUT	n/a	+33%	No change	No change	-40%	-11%	n/a
P	-10.2% (+27.6% nominal change)	- 0.6% (+41.2% nominal change)	- 5.9% (+33.7% nominal change)	+ 11.9% (+58.9% nominal change)	+ 27.1%- (+80.6% nominal change)	- 13.7% (+22.6% nominal change)	Europe: - 32.2% (-3.6% nominal change) Other : - 44.5% (-21.2% nominal change)
FIN	-5%[13]	n/a	n/a	+ 14.2%[14] + 2.4 (%)*	n/a	Peak : - 61.2%	Examples[15]: Sweden - 47.4% Germany - 19.2% USA - 16.8%
SWE[16]	-8% (+8% nominal change)	n/a	+ 15 to 20%[17]	+ 60%[17]	-	n/a	n/a
UK[18]	- 23.7% (- 10.2% nominal change)[19]	Residential: -0.7% Business: -33.1%	Resid'l exclusive: +37.5% Bus. exclusive: +37.7 Wholesale: +54.4%	- 13%	- 19.8%	B1-rate: - 19.5% B-rate: - 35.5%	- 22.3%

Source: National Regulatory Authorities (1995)

n/a : Data showing % changes in specific tariff from 1990-1995 not provided by the NRA.

Notes on Table

1. Belgacom is paying back the guarantee previously required from customers.
2. Period : 1994-1995. Since July 1995. calls from Denmark to other EC countries, Norway and Switzerland have been reduced by 20% (off peak). A similar 20% reduction to USA and Canada occurred in January 1995.
3. Period 1990-1994. Inflation indicator for the period indicated an increase in prices of + 15.4%
4. Average overall tariff change for call charges only
5. Tariff changes refer to 1994 only
6. Period 1990 - 1994
7. Percentage change represents both connection and rental charge
8. Decrease attributable to creation of enlarged local calling areas
9. Data provided for a range of tariffs varying from intra-EC /cross-border - 19% (-27.5%) to North American routes - 32% (- 29%)

10. Includes calls to Northern Ireland
11. Since 1 July 1993 the duration of one tariff unit has been 4 minutes (peak rate) and 8 minutes (off peak). Since 1 May 1995 a monthly minimum of 20 units is charged per subscriber line.
12. Data provided indicates price change of an unspecified basket of services in relation to consumer price index.
13. The global figure has been calculated for residential users who mainly use local telephone services. The figure would be different for business users because they use more long distance and international telecommunications and in these services the prices have dropped considerably.
14. Data provided indicates price change of a specified basket of local services in relation to consumer price index. The basket consists in 8% of connection fee; annual subscription fee and 750 local daytime 4 minute telephone calls.
15. Cheapest rate and cheapest operator: (1990) Telecom Finland and (1995) Telivo.
16. Period 1993 - 1995.
17. Calculated on the basis of Telia's index of its tariff basket.
18. Price changes are for BT.
19. The global figures for the overall percentage change in BT's tariffs between 1990/91-1994/95 and relates to an overall weighted average of all the services in the price control basket, not just the ones listed in the table.

Table A10 - Special tariff schemes for targeted user groups in the EC

Country	Description of scheme
BE	The contract between the Belgian State and Belgacom imposes certain tariff reductions for social or humanitarian reasons. i) social groups: Around 370.000 people are benefiting from the social telephone rate (8.1% of the total number of connections). The following tariff reductions are applied: 70% reduction of connection charges, 50% reduction of rental fee, and 50 free units of traffic for 2 months. ii) Elderly and handicapped: Reduced tariffs for elderly (over 65) and handicapped.
DK	*Specific text-telephone service under operation for hearing impaired users, including provision of different types of terminal equipment.* The service is provided on a non-commercial basis. Reduced tariffs for visually impaired and blind users when using Directory Services.
D	Reduced tariff scheme for elderly, disabled, and low income groups. These special groups receive a 5 DM reduction on rental charges and 30 units free of charge per month. There will be a tariff re-balancing in 1996 which will make larger discounts. There is no low usage tariff scheme and there is none foreseen.
EL	i) Disabled: Special reduced rates have been introduced for blind subscribers. Blind subscribers are allowed 150 units a month free of charge on the first main telephone line subscribed in their name. Additionally, specially designed public card phones have been installed at airports, railway and bus stations and hospitals. There is no special policy on low user schemes within the context of universal service.
E	i) Elderly and handicapped: Special "social subscription" that consists of a 95% discount on the monthly fee and a 70% discount on the initial connection fee for those citizens over 64 and handicapped (only when they do not receive a certain level of income).
F	i) Handicapped, elderly and social groups: Reduced tariffs for special and social groups, such as handicapped, aged over 65 living alone or with their partner and war veterans. These reductions include a 50% reduction on subscription fee, 40 units free of charge per month (domestic calls), and free access to information services. ii) The low user scheme gives a reduction for those who use less than 26 units per month.

Country	Description of scheme
IRL	Free rental and subsidised usage scheme provided to specific user groups such as the deaf, the aged and the disabled. i) Disabled: The deaf customers can use special text terminals (Minicom) to communicate with non-deaf customers. Due to the fact that this method is slower than normal speech, the operator has a refund scheme under which deaf customers are entitled to reclaim up to 70% of the cost of their calls subject to an annual maximum. Additionally, the State may refund the VAT element of the purchase price of the Minicom equipment for the deaf. ii) The company also provides financial assistance to other voluntary charitable groups, such as Samaritans, Irish Cancer Society, Rape Crisis Centre, etc. which allows the organisation to be contacted by users of their services either by freephone or at a reduced rate. iii) Low user scheme: there is a low user scheme on its analogue mobile service which provides service with connection charges as little as 41% of normal charges, rental charges as little over 103% of normal charges but which includes a credit per month on national calls. iv) Aged and disabled: The Department of Social Welfare provides state aid for the aged and disabled, i.e., free telephone rental for certain aged and disabled people living alone or with other excepted persons.
I	Since January 1995, there is a special scheme for low consumption users upon request (it includes a low rental fee and low tariffs for low consumption per month, i.e., up to 40 units/month: 50 lira).
L	P&T Luxembourg has no plans to introduce specific schemes targeted towards particular social groups as the basic telephone tariffs are very low.
NL	There is no special scheme targeted to a specific group of customers.
AUT	Certain social groups, including the blind, handicapped, pensioners, low income people, students, are exempted from paying the following fees: basic monthly connection fee and one free hour of telephone use per month.
P	There are special tariff reductions for retirees and pensioners with a monthly salary less than the national minimum. The reductions are the following: a 60% reduction of subscription fees and at least 25 units free of charge per month. The operators are equally obliged to concede the following facilities for population with special needs: micro telephones with amplifier, a call warning, etc.
FIN	There are no special schemes regarding telecommunications charges. The state budget finances special services targeted to some special groups, which operators are not willing to provide (i.e. special services for disabled).
SWED	There is an agreement between the State and Telia, where the latter has committed itself to provide the low consumption subscription (Telia Mini). The quarterly fee must not exceed 70% of the regular quarterly fee and at least 10% of household customers should benefit from to this type of subscription.

UK	BT provides the following schemes: Spread connection fee - which divides the initial connection charge into 5 quarterly payments (plus an administration charge) Deposits - in 1996 BT plans to introduce Usage Limits, whereby new customers agree a financial ceiling on call expenditure. This should largely eliminate the need for deposits. Low User Scheme - BT provides this under its licence, the guidelines for which are negotiated with the regulator. Elderly and Disabled - new customers over 65 will not be asked for a deposit unless they owe BT money or are bankrupt (Kingston has a similar policy) Protected Service Scheme - enabling elderly and disabled customers to nominate a third party to deal with bill payment. Free Priority Fault Repair Service - for customers whose telephones are vital lifeline - scheme is designed to ensure priority treatment in the event of a fault. Visually impaired and blind customers - are offered large print/Braille/"talking" bills and free Directory Enquiries (all companies offer the latter in order to meet a licence requirement). Free Directory Enquiries is offered to visually impaired customers and others who are physically unable to use the printed phone book. Deaf users - have access to Type talk, a national telephone relay service, which BT is obliged under its licence to provide and fund. A Text User's Rebate is available to acknowledge that calls made on by text phones take longer than the voice telephony equivalent. Some cable companies offer disabled customers personal visits to collect their bill payments.

Source: National Regulatory Authorities (1995)

QUESTIONNAIRE SENT TO MEMBER STATES

I - THE CURRENT SITUATION WITH RESPECT TO UNIVERSAL SERVICE.

Questions concerning the general level of telephone penetration.

1. *What was the total number of business telephone lines and residential telephone lines at the end of 1990 and at the end of 1994? Please give more recent figures if they are available?*

2. *What was the ratio of residential lines to number of households at the end of 1990 and at the end of 1994?*

3. *What was the total number of public payphones at the end of 1990 and at the end of 1994?*

4. *What was the total number of mobile cellular telephone subscribers at the end of 1990 and at the end of 1994? Please give more recent figures if they are available*

Question concerning basic aspects of service quality

5. *Please give details of the main indicators of telephone service quality that are currently published. Please give details where they are available for supply time for network connection, fault repair times and compensation schemes and proportion of public payphones in working order.*

Question concerning the basic telephone service features that are offered.

6. *Please give details of the main service features that are offered by the fixed telephone service operators ? Please indicate whether any of the following service features are commercially available or the date planned for their introduction : DTMF dialling, call interrupt/waiting, call forwarding or call transfer, voice-mail, calling-line identification. Please also specify whether customers are offered the possibility of per line or per call blocking of call facilities, (such as calling identification), or the possibility of blocking access to specific value-added services (such as premium-rate or "kiosk" services)?*

II - THE ADJUSTMENT OF PRICING STRUCTURES, AFFORDABILITY AND SPECIAL MEASURES.

In most Member States, tariffs structures are changing in line with the process of rebalancing to reflect modern cost structures, competitive pressures and to encourage more efficient use of telecommunications networks.

Questions concerning major pricing adjustments, whether there is a measure of decline in prices overall, if price-cap schemes are being used to control pricing adjustment, the affordability of telephone service and whether special tariff schemes are available.

1. *What are the major tariff reforms that have been undertaken or are being planned?*

2. *Is it possible to give a measure of the average change in tariff levels since 1990? (Please specify in relation to connection charges, rental/fixed charges, local, long-distance and international call charges)*

3. *What are the particular target levels, if any, for the adjustment of tariff structures?*

4. *What price-cap schemes, if any, in operation? What are the plans, if any, to introduce price-cap schemes or modify existing schemes?*

5. *Please give the latest information concerning specific schemes (either voluntary or as a result of regulation) which are being used or planned in order to provide service to a specific group of customers. This includes schemes targeted towards particular social purposes (schemes for customers with disabilities / the elderly/ those on low incomes, etc.), schemes to offset the adverse impact on certain customers of re-balanced tariffs? Additionally, what low user schemes (either voluntary or as a result of regulation) are available or being planned?*

ANNEX 3 : LIST OF ORGANISATIONS PROVIDING WRITTEN RESPONSES TO THE THEME PAPER ON UNIVERSAL SERVICE

ANGA
Antelope Consulting
APEC - Association of Private European Cable Operators
ARD - Radio + TV
ASIMILEC
AT & T
ATC Finland
Austrian Ministry of economy and transport
Belgacom
BellSouth
British Telecom
Bureau Européen des Unions des Consumateurs
Conseil National du Patronat Francais
Compagnie General des Eaux
COST 219 - National Research & Development Centre for Welfare & Health
COST 219 The Mike Martin Consultancy
CRID
CURDS - University of Newcastle
Dansk Industri (DI)
Department of Trade and Industry (UK)
Deutsche Postgewerkschaft
Deutsche Telekom
Direction Générale des Postes et Télécommunications (FR)
ETNO
EU Committee of the American chamber of Commerce in Belgium
European Conference of Data Protection Commissioners
Forschungsinstitut für anwendungsorientierte Wissensverarbeitung
France Telecom
Fundesco
GEF - Global Electronic Finance Management
INESC
Ingeneria y Gestion de Redes
INTEL
International Council of Aircraft Owner and Pilot Associations
IPTT
Kooperativa Institutet
Erika Mann M.E.P.
Mercury Communications Ltd
MFS Communications
Ministerie Van Verkeer en Waterstaat (NL)
Ministry of Transport & Communications (FIN)
Ministry of Transport & Communications (SWED)
Omnitel Pronto Italia
Portugal Telecom
PTT Force Ouvrière
PTT Telecom
STET
TAG - Telecommunications Action Group

TELECEL S.A.
Telecom Eireann
Telefonica de Espana
Telenor
TELIA AB
The Finnish Consumers Association
Thyssen Telecom A.G.
The Telecommunications Managers Association
United States Council for International Business
Universidad de Valencia
Universität Potsdam
VEBACOM

ANNEX 4 : SUMMARY OF THE MAIN ISSUES RAISED IN THE PUBLIC CONSULTATION ON THE UNIVERSAL SERVICE THEME PAPER

A broad range of comments where made during the public consultation. It is appropriate to highlight five main issues raised:

1. Scope of the universal telephone service

There is recognition of a continuing improvement in the level and quality of service within the European Community. Few comments favoured a radical reshaping of the current concept of the universal telephone service, which should remain narrowly defined, but open to future evolution in the light of changes in customer and market demand. Nevertheless, some organisations, particularly, user organisations and operators from the less favoured regions suggested that the current concept of universal service could be more ambitious and should include both leased lines and ISDN.

At the same time, there was support for measures at a European level to strengthen the current concept in order to overcome important gaps at present with regard to the scope of services within the universal telephone service and the need for an explicit obligation of affordability. Emphasis was placed on ensuring users had adequate information and control over what they spend (e.g. itemised billing, flexible ways of paying, such as spreading connection charges over a series of installments or allowing users to block calls to particular numbers).

2. Quality of service and comparability of service at a European level

A particular concern resulting from the consultation was on the considerable variation in the quality of service targets currently established at a national level, as well as national enforcement of targets and the availability and nature of compensation schemes where targets were not met. This concern from users was compounded by the difficulties faced by some national regulatory authorities in obtaining basic indicators of the universal telephone service, such as the number of households with a telephone, and by the lack of comparability of certain of data between Member States.

The situation is partly remedied by the Voice Telephony Directive, which provides for the setting and publication of national quality of service indicators. However, the consultation indicates that users seek more than this and that varying levels of service in the Member States impacts the provision of pan-European networks and services and, if not corrected could lead to widening the gap between the Community's developed areas and its less favoured regions, undemining the objective of economic and social cohesion.

A further concern raised by consumer organisations was also whether adequate sanctions exist at a national level to allow quality of service to be enforced.

More generally such organisations raised the issue of consumer involvement at both a national and European level in the setting of quality of service targets and measures of affordability, and more generally, in decisions as to the future evolution of universal telephone service and of the information society.

3. Costing and funding of the universal telephone service

The most recent consultation exercise did not invite detailed comment on the costing and funding of the universal telephone given their detailed discussion in the context of the Infrastructure Green Paper (see COM(95) 158). These principles are reflected in the proposed Interconnection Directive and the Full Competition Directive.

Nevertheless, where comments were made they tended to address practical issues associated with costing (for example, the calculation of the value to existing operators providing the universal telephone service) or with funding (the requirements of a universal service fund, the feasibility of "pay or play" mechanisms). Additional guidance on these practical issues at a European level was felt to be useful, even though the main regulatory principles were found in the proposed legislation.

4. Tariff rebalancing

There was general support for the process of tariff rebalancing to which the European Community is committed, with many of those comments stressing the need for completion of the process by the date set for full liberalisation. Many pointed to the benefits which overall lower tariffs would offer many users.

At the same time, there was recognition of the need to protect particular groups of users from the effects of unconstrained rebalancing in order to ensure that customers are not forced to leave the network because of the costs involved. Consumer organisations stressed in this context the role to be played both by price cap mechanisms and specially targeted tariff schemes.

5. Public access to the information society

The fundamental importance of the information society was widely recognised, but the emerging services were not considered part of the universal telephone service today. At the same time, the idea of market-led "public access" (to connect schools, hospitals, libraries, etc.) was supported, though it was not considered necessary to define precise targets at this stage.

At the same time, there was recognition of the need to put in place appropriate mechanisms to monitor the demand for, and take up of, new services at both a national and European level in order to keep the scope of the universal telephone service under review, and in particular to measure the extent to which "public access" was being developed, particularly in the less favoured regions in the Union.

Stress was also placed by consumer organisations of the importance of their voice being heard in this monitoring process.

ENDNOTES

1 In Sweden, for example, new subscriptions to mobile services have for the first time exceeded subscriptions to the fixed network.

2 In Spain, for example, more than 180,000 subscribers benefit from wireless local loop services and there are more than 700 wireless public call boxes.

3 Proposal for a European Parliament and Council Decision on an action at a Union level in the field of satellite personal communications services in the European Union, COM(95) 529, 8.11.95

4 VSATs - Very Small Aperture Satellite Terminals.

5 Article 5 and Annex III

6 See "Performance Indicators for Public Telecommunications Operators", Information Computer and Communications Policy series, No. 22, OECD, Paris 1990 and ETSI Technical Report "Quality of service indicators for Open Network Provision (ONP) of voice telephony and Integrated Services Digital Network (ISDN)" ETR 138, July 1994

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