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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Better access for rural areas to modern ICT

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1. INTRODUCTION

The efficient use of information and communication technology (ICT), driven by better highspeed internet (broadband) access, is widely recognised as key to raising productivity and stimulating innovation in Europe, including in rural areas¹. It can play a significant role in promoting entrepreneurship and economic progress in rural areas, thus contributing to improve the competitiveness of agriculture and forestry, the quality of life and diversification of the rural economy.

High-quality internet provision can help unlock the potential of rural areas, and can make them more attractive places to live. ICT helps existing businesses to perform tasks more effectively and efficiently and responds to their demand for rapid access to diverse kinds of information. It creates greater scope for new businesses to start up, and makes it easier to deliver vital services and better quality of life².

At present, significant differences exist in the provision and adoption of e-services and highspeed quality internet access between Member States (MSs), with gaps between their rural areas, and between rural and urban areas, being even wider. The bulk of the rural population receives lower quality services at higher costs.

The European Economic Recovery Plan $(\text{EERP})^3$ highlights the importance of broadband communications for modern economies and aims to ensure that broadband is available to all Europeans by 2010. In this context, the Commission has proposed an additional funding of 1.0 billion to bridge the broadband gaps, which would allow rural areas to specifically address some of the problems they are confronted with as a consequence of the economic and financial crisis⁴.

This joint Communication responds to the request made by the Council (Agriculture and Fisheries) that the Commission study the question of better access of rural areas to modern ICT, with special reference to high-speed internet access⁵. It adds to the policy debate on how rural development contributes to the Lisbon strategy and the Community ICT policy. A study on "Availability of access to computer networks in rural areas" commissioned by DG Agriculture and Rural Development and completed in December 2007 has been used as a background document for parts of the Communication and the Annex⁶.

¹ COM(2007) 803, 11.12.2007.

² SPEECH/07/311 by Commissioner Mrs. Mariann Fischer Boel.

³ COM(2008) 800, 26.11.2008.

⁴ COM(2009) 36/2, 28.1.2009.

⁵ Council Conclusions 7085/07, 19 March 2007.

⁶ SAACNRA, 2007, http://ec.europa.eu/agriculture/analysis/external/index_en.htm.

2. POLICY CONTEXT

The achievement of a knowledge and innovation based society is one of the major priorities of the EU and the role of rural development in enhancing ICT take-up in rural areas was recognised in the renewed Lisbon agenda⁷.

In 2005, the i2010 strategic framework for modernising and deploying the EU policy instruments to encourage the development of the information society up to 2010 was set in place. In the ensuing Riga Ministerial eInclusion Declaration⁸, Member States agreed a number of targets: for example, to halve the gap in internet usage by 2010 for groups at risk of exclusion and to increase the availability of broadband infrastructure to reach at least 90% of EU citizens and businesses by 2010, mobilising the appropriate instruments including the Structural Funds (SF), the European Agricultural Fund for Rural Development (EAFRD), the EU information society policy and EU the competition policy in a joint drive to bring broadband to all Europeans.

Rural development policy is the second pillar of the Common Agricultural Policy and focuses on jobs, growth, the competitiveness and sustainability of agriculture, forestry, the food industry and rural areas; upgrading human capital; maintaining and enhancing the environment; quality of life and fighting climate change. Within this context, encouraging the take-up and diffusion of ICT for farmers, agri-food and forestry as well as for rural areas in general and rural tourism are identified as key actions in the Community strategic guidelines for rural development⁹. The European rural development network, a new important element of the rural development policy build-up, provides the forum for defining needs and exchanging good practices.

Both the SF and the EAFRD support investments in ICT services, infrastructure, products and skills, with large spill-over effects between and within territories. In the current period, most of the investment planned for the development of the information society in rural areas and less developed regions will support the development of e-services, with more limited investment in ICT infrastructure¹⁰. In the field of skills upgrading and training, the European Social Fund (ESF) and the EAFRD provide funding opportunities for people and entrepreneurs located in rural areas, with the EAFRD offering specific additional options for farmers, the food industry and forest managers. The 7th EU Research Programme (FP7) further stimulates research and the transfer of innovation in rural areas notably through the initiatives Regions of Knowledge and Research Potential where ICT is one of the core sectors.

The strategic guidelines for rural development for 2007–2013 encourage synergy and complementarity between the rural development, employment and structural policies. In the case of ICT, such synergy can be most fruitfully exploited by embedding the actions for developing the information society in rural areas within broader regional or national ICT strategies supported by both the EAFRD and the SF. This strategic approach should ensure compatibility and complementarity with regional and national ICT policies. Within this context, the Commission, MSs and stakeholders should work together to develop an EU

⁷ COM(2005) 330, 20.7.2005.

⁸ http://ec.europa.eu/information_society/events/ict_riga_2006/doc/declaration_riga.pdf.

⁹ Council Decision 2006/144/EC of 20 February 2006 on Community strategic guidelines for rural development.

¹⁰ Demarcation lines on the use of the various EU funds are set by MSs and regions.

broadband strategy to speed up the extension and upgrading of broadband networks as called for by the EERP.

Achievement of better access to internet and ICT in rural areas could be seen also as equally important for the (potential) candidate countries for EU accession as it is for the EU, as their preparation for implementation of the EU policies supported by EU pre-accession funds has already started.

3. Areas for action and current situation

3.1. ICT developments and priorities for rural areas

In its Communication on Bridging the broadband gap (2006)¹¹ the Commission identified the major reasons for the rural-urban broadband divide, such as low density of population, remoteness, lack of competition. Other socio-economic factors, such as low income and education, lack of access to new technologies, low quality of service, lack of applications with relevant content for rural and farm businesses, low awareness, or an ageing population, result in lower levels of adoption¹².

Demand stimulation: Content, services and applications

Broadband-enabled applications bridge time and distance and allow services to reach individuals and businesses in their own communities. The focus on **development of services and relevant content** is central in pushing up the demand for and take-up of on-line public services and broadband in rural areas.

The existing urban-rural ICT gaps demonstrate the need for national and local administrations and institutions to invest in demand stimulation measures. Development and availability of public services such as e-government, e-health and e-learning is crucial along with e-skills and local applications.

Business services connected with broadband and the internet, including those relevant to agriculture, should be stimulated as take-up of broadband by businesses is a key to efficiency gains. Better accessibility of businesses enables better information flows, market transparency and price discovery, facilitates food industry cooperation and reduces transaction costs.

Currently, the use of public services in the EU's thinly populated areas is more limited than in densely populated areas¹³. For example, take-up of e-government services in the EU-27 is respectively 22.5% in thinly populated areas and 32.9% in densely populated areas. Internet use among SMEs and micro-enterprises in rural areas is at a very low level compared to large enterprises as shown in a number of RDPs (e.g. Bulgaria, UK England, etc.). SMEs suffer in particular from the lack of skilled labour in the field of new technologies¹⁴.

In 2008, about half of the people in the thinly populated areas of the EU-27 (41.7%) never used the internet compared to 27.4% in densely populated areas. In certain MSs about half of

¹¹ COM(2006) 129, 20.3.2006.

¹² COM(2006) 129, 20.3.2006 and SAACNRA, p. 64.

¹³ Eurostat definition based on degree of urbanisation.

¹⁴ COM(2008) 394, 25.6.2008.

the entire population never used a PC (e.g. Bulgaria, Cyprus, Greece, Italy, Portugal, Romania, Malta, etc.). In the EU-27 the DSL internet take-up by households in thinly populated areas is just 30% versus 40% in urban areas¹⁵. Over the period 2005–2007 urban DSL internet take-up increased more than rural take-up and overall, at national level, take-up is two to four times lower in rural than in urban areas¹⁶.

Broadband infrastructure

The role of MSs, regions and local authorities in incorporating the socio-economic needs of rural areas and the rural population into the national strategies and national/regional programmes is vital. The ongoing efforts to equip the EU's rural areas with modern ICT connections including the use of new wireless and satellite-based technologies should continue and should be stepped up. In this context, the Commission, in its EERP has proposed an additional funding of l.0 billion. Public funding for such initiatives needs to comply with the State aid rules of the EC Treaty.

In December 2007 broadband (DSL) coverage reached an average of 98% of the population in urban areas, while coverage of rural areas was limited to just 70% of the EU-27 rural population¹⁷. Rural coverage remains poor in Slovakia (39%), Poland (43%), Greece (50%) and Latvia (65%) as well as in Bulgaria and Romania.

3.2. Actors missing the opportunity

Farm businesses

Encouraging the take-up and diffusion of ICT in the agrifood sector as a whole, and for the agricultural business in general, is a key action in rural development. The lack of access to broadband reduces farmers' competitiveness considerably, restricts their options for applying better and innovative farm management, adjusting production patterns to current economic developments, controlling the volume and quality of production, and curtails their knowledge of markets and economic trends, agricultural research and development. It limits their commercial opportunities, prevents the use of advisory services, restricts their contacts with local and national administrations and hinders their participation in the decision-making process. Lack of internet access and e-services could also weaken farmers' stimuli for upgrading their professional skills and reduces the spill-over effects from sharing and exchanging successful professional experience.

Small and medium-sized enterprises and micro-businesses

ICT could act as a catalyst for (small) farm and non-farm businesses, including food industry, to work together, to network and to grow, strengthening in this way their competitiveness. It could positively affect their work performance and labour productivity, and can help farmers fulfil their multi-functional role in rural areas. Economies of scale can be achieved and e-business, e-commerce and e-banking can be more easily carried out.

¹⁵ Eurostat.

¹⁶ Idate definition of rurality. See the Annex for more details.

¹⁷ Idate definition of rurality. See the Annex for more details.

The promotion of ICT use in the food industry and the creation of infrastructure that to ensure the access of food processors to internet can become important growth factors for the sector leading to increased added value and a better integration between farmers and processors.

Young people

Young people are one of the major drivers behind any ICT development in rural areas. Lack of internet provision isolates them from global events and information flows, and reduces their access to labour markets and the means of developing skills to qualify for well paid quality jobs. Creating access and relevant applications, especially for young people leaving school and entering working life, is essential if they are to be encouraged to stay in rural areas.

Women

More women in rural areas are becoming entrepreneurs and are getting involved in socioeconomic activities. Their access to labour markets has to be eased further, and one way of doing this is by providing them with high-speed internet access and raising their digital literacy.

Elderly people and disadvantaged groups

Farmers at the end of their careers, old people and disadvantaged groups in rural areas have specific needs, many of which could be addressed through the supply of accessible and relevant technologies and ICT applications. ICT could ease their access to public services, job opportunities and quality education.

3.3. Potential impacts of rural ICT projects¹⁸

By providing rural areas with services, products and better infrastructure, a wide range of impacts and benefits could be achieved. However, existing environmental considerations or limitations have to be taken into account.

For example, by investing in on-line booking systems and web portals, farmers and rural businesses provide better access to information and leisure opportunities for local and external communities, create awareness of local natural and social values, increase the number of tourists, create growth and employment possibilities, and boost domestic economic and social development.

ICT projects can also have a strong positive impact if focused on adding value to local products or improving supply chain systems, precision farming, mapping and promotion of decentralised renewable energies such as bio-energy, preservation of the natural heritage, provision of public and business information, provision of data for specific users and for educational purposes, capacity building, etc. At the same time, there could be positive spillover effects leading to increased use of bio-energy, better access to training opportunities, development of employment guidance, effective delivery of public services, promotion of sustainable farming and last, but not least, transfer of innovation and promotion of good practices.

¹⁸

Based on SAACNRA (2007) analysis of good practices, pp. 25-38.

4. ACTIONS PROMOTING ICT IN RURAL AREAS

4.1. The EAFRD and ICT

Actions

In the current programming period, rural development pays special attention to ICT. In 65 RDPs there is a reference to broadband and ICT in the baseline analysis and in 37 RDPs in the *ex-ante* evaluation (out of a total of 94)¹⁹. The analyses confirm the significant differences between MSs and regions. In half of the programme areas (44 RDPs drawn up by 7 MSs) the ICT situation in rural areas is recognised as being at average level, while in 16 RDPs (13 MSs) it is considered to be poor.

The EAFRD supports the development of ICT businesses, services, skills upgrading and broadband in rural areas in various ways²⁰. Direct actions on **ICT as a basic service** for the rural economy and population include the development of e-health, health advice and medical care, business support, local public services, mobile or youth ICT centres, public internet/communication points, broadband infrastructure including wireless technologies, etc. Specific situation-driven actions cover, for example, IT equipment in small schools, transport services by telephone calls, security of rural inhabitants, teleworking or specific village ICT initiatives (47 RDPs by 16 MSs)²¹.

Rural non-agricultural businesses of farmers related to ICT are mentioned in 21 RDPs (15 MSs) and cover the development of e-services, e-commerce, access to the internet, etc. Farmers can further upgrade their IT equipment under the **farm modernisation** measure. The creation of websites for marketing and e-booking, tourist web-portals and information centres will characterise the ICT actions linked to **rural tourism** as envisaged in 34 RDPs (13 MSs).

The creation of ICT based services, cooperation networking and cluster formation, e-commerce and e-marketing will be main targets for **non-farm rural micro-enterprises and businesses** as specified in 28 RDPs (17 MSs).

Farmers, foresters and food processors will have access to significant support for **professional training in ICT and computer skills** (40 RDPs), e-learning (13 RDPs), information activities using ICT (11 RDPs) or area-specific actions such as networking, demonstration projects or distance learning.

The use of ICT for the environment is represented by forest fire tele-detection and monitoring systems, communication equipment (e.g. for prevention of forest fires) and networking (14 RDPs).

Rural development will also support IT investments such as networks in public buildings, training and information on environmental issues in Natura 2000 combined with internet forums for exchanging views, databases and e-catalogues for the conservation of biodiversity resources, provision of advisory services, promotion of producer groups, raising e-skills of the

¹⁹ This covers also the six framework and network RDPs, which, however, are excluded from the analysis. See the Annex for more details.

²⁰ Investments in hardware and software are eligible in all programmes.

²¹ Several MSs opted to leave the content of certain measures open, without specifying any priority actions; these are not counted.

rural population, etc. National and regional web portals for rural development networks will also be financed.

Leader actions could cover a wide range of ICT investments in rural areas such as innovative communication technologies in addressing tourism, productive sectors, the environment and cultural assets in the fields of transnational and inter-territorial cooperation, training and access to the internet.

Budget

ICT actions in rural development are embedded into several measures, where also non-ICT related actions will take place²². In total, for basic services for the rural population the EAFRD will spend 2.7 billion. Another 4.9 billion will be spent on farm diversification, creation of non-farm micro-enterprises and rural tourism. Training and information actions under the EAFRD (including those on e-skills) account for 1.2 billion in total. Additional money for ICT projects could be spent under Leader and/or within other rural development measures.

A good share of technical assistance funds in RDPs are dedicated to investments in hardware and software in public administration to offer on-line services and consultations to (potential) applicants.

Targeting, monitoring and evaluation

The Common Monitoring and Evaluation Framework (CMEF) for rural development 2007–2013 provides a solid basis for targeting, monitoring and evaluating the situation in rural areas with respect to many indicators, including ICT related.

In the context of the CMEF, for example, Austria aims to ensure that 80 000 people take advantage of better services through internet availability, while the Czech Republic targets 70 000 people. In terms of internet penetration, Finland aims to achieve wireless coverage of the whole country by 2013, while Lithuania, for example, targets 99% coverage with 2 500 internet access points.

4.2. Cohesion Policy funds and ICT

To achieve overall objectives, synergies between Community, national and/or regional financing and policies having an impact on ICT developments in rural areas must be fully exploited.

In the current programming period, Cohesion Policy funds will continue to support the ICT development, including in rural areas. Approximately €15.3 billion (4.4% of the total Cohesion budget) will be directly invested in ICT priorities, including e-public services and broadband infrastructure. The European Social Fund (ESF) will invest considerably in e-skills in the framework of different strategic priorities such as life-long learning, workforce adaptability and training for unemployed persons, including those in rural areas.

²² The programming of the budget in rural development is done at axis and measure level, and not at action level. Because of this, data on action-related investments is not available.

4.3. Research

Research plays a role in understanding the ICT needs in rural areas as well as in discovering efficient and effective ways for solving existing problems. Further to the support for projects under FP6 and FP7, two ERA-networks have been created under the umbrella of the Standing Committee on Agricultural Research (ICT-AGRI and RURAGRI), which are focusing their activities on the coordination of national research programmes, including ICT applications in agriculture and in rural areas.

4.4. ICT projects in rural areas and driving forces for their successful implementation²³

ICT projects in Europe's rural areas focus on (i) equipment to access the internet, (ii) content, covering what people look at and use on the internet, including the services which encourage them to go on line, and (iii) developing new skills to access the internet. Projects that combine the three aspects make the greatest impact.

In addition to good project management, economic, political and social factors comprise the set of conditions that can make ICT projects in rural areas successful and can guarantee their greater ownership within the local community, high take-up and sustainability.

Community financial support

The cost of providing infrastructure, delivering training and adapting services is higher in rural areas for a number of reasons as aforementioned. Many commercial providers focus on densely populated urban or peri-urban areas, where they can maximise take-up and return on their investments. In many cases initial take-up in rural areas is slow as there is more reluctance to adopt new technologies than in urban areas. Public funds including **EU funds can help to bridge the investment gap in ICT access infrastructure, on-line services and other promotional measures supporting demand** in rural areas, including mountains and islands. Appropriately addressing the needs of these areas in national and regional strategies and programmes is essential.

Support from national and regional authorities

Beyond ensuring funding options, **various forms of national and regional support** have raised the sustainability and success of ICT projects in rural areas in recent years. Whether financial or legal support has been given or governments and local authorities have kick-started the projects, benefits for rural agricultural, food and non-farm businesses as well as the rural population have been created.

Involvement and cooperation of local actors

The engagement of local (economic) actors can have a marked effect on a project if they develop their own interest in deploying the new technology. Involvement of the local **population** is needed for projects to achieve sustainability. Establishing local, community or group broadband aggregation schemes could be a step in initiating local broadband actions and further help in (better) defining the broadband strategies. More attention needs to be paid

²³

Based on SAACNRA (2007) analysis of good practices, pp. 25-38.

to **cooperation within the communities** in the matter of broadband resources and facilities and their efficient use. This has also been confirmed by the Leader+ good practices.

Understanding and reacting to new business opportunities and needs

Globalisation and the internet have created intensive business competition for markets and clients. To sustain their business, rural entrepreneurs have to react adequately and exploit the advantages of ICT.

Understanding **what potential users want**, and in what form, could substantially raise the take-up and provide correct responses to existing demand in rural areas. In this way, factors such as unemployment, low internet usage and access to knowledge in rural areas could be improved. The **creation of greater ownership of a project**, which may even imply involvement of the community in its management, could ensure greater take-up, higher efficiency of the investment and continuation of the activity after initial funding has ended.

4.5. Promotion of good ICT practices for rural areas

The exchange of good practices helps the promotion and development of innovative products and services, creates value-added in the development of strategies, improves knowledge and shows how the correct use of the assets can turn into valuable and positive outcomes.

The external study managed by DG Agriculture and Rural Development has prepared a database of 67 **good ICT practices in rural areas**, the dissemination of which could stimulate innovative projects and support the strategies for rural areas. The database covers projects financed by private and/or Community funds mostly within the period 2000-2006. They were also included in the database of the European broadband web-portal launched by the Commission in June 2008²⁴.

Such exchange of good practices in the field of rural development can be further embedded in the EU and national rural development networks, the Interreg programmes and promoted via Leader.

5. CONCLUSIONS AND RECOMMENDATIONS

The development of ICT in rural areas requires a strong strategic approach with complementarity and synergies between Community, national and regional funds and policies, all contributing to rural development.

With this Communication the Commission:

- Reaffirms the 2010 "broadband for all" objective as set out in the context of the EERP and recalls that 30% of the EU's rural population²⁵ is currently excluded from broadband access.
- Calls on MS to use the funding for broadband infrastructure under the EERP in efficient and effective way boosting the economic and social life in rural areas. For this to happen,

²⁴ www.broadband-europe.eu.

²⁵ Idate definition of rurality.

targeted adaptation of RDPs taking into account the needs of MSs should take place in 2009 following the endorsement of the Commission's proposal by the Council;

- Recommends stepping up actions supporting demand for and supply of ICT technologies. This should include actions increasing local and backhaul access to an affordable ICT infrastructure and access to as well as development of on-line services and relevant content for rural farming and non-farming businesses. Actions supporting demand should include activities such as PC ownership, professional ICT and e-business training for farmers, food processors, rural agricultural and non-agricultural businesses as well as digital literacy actions for the rural population. Actions should be accompanied by networking, benchmarking monitoring and other actions (possibly in the framework of existing ICT observatories) aimed at supporting local and regional capacity to manage, plan and implement ICT projects within the framework of the RDPs;
- Encourages MSs and regions to make use of the technical assistance budgets to launch studies/analyses reporting on the ICT situation in rural areas and in agriculture, stock-taking of current ICT initiatives and monitoring of ICT indicators;
- Calls on MSs and regions in their annual reports on rural development from 2010 and onwards to indicate the ICT-related actions undertaken in the report year and possibly their financing. The Commission is prepared to report on the above in a working document based on the information submitted by MSs;
- Urges MSs and regions, in the framework of their 2010 mid-term review of rural development, to put greater emphasis on ICT actions, including in the field of agriculture, forestry and the food industry, and on progress made, on the basis of which to propose further strengthening of ICT-related actions and adjustments in RDPs where necessary;
- Underlines that for achieving effective results in rural areas, correct targeting and complementarity of Community funding are needed to create synergy effects. To reach this goal it is crucial that the national and regional authorities managing different Community funds (SF/CF/EAFRD) cooperate closely with each other;
- Stresses the importance of dissemination and sharing of good ICT practices in rural areas within the European and national networks for rural development. The EU RD network should provide useful suggestions as regards the implementation of the ICT policies in rural areas. An appropriate event will be organised in the second half of 2010;
- Encourages ICT project managers and developers in rural areas to use the European ICT web-portals that have been set up (www.broadband-europe.eu and www.ePractice.eu).