

EN

EN

EN



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 2 July 2008
SEC(2008) 2183

COMMISSION STAFF WORKING PAPER

**Towards a Renewed Social Agenda for Europe — Citizens' Well-being in the
Information Society**

COMMISSION STAFF WORKING PAPER

Towards a Renewed Social Agenda for Europe — Citizens' Well-being in the Information Society

1. SUMMARY

Digital technologies are now an essential part of daily life. We use them at work, in day-to-day relationships, in dealing with public services, and a lot more besides. They touch our lives in ways that we are often unaware of or don't even think about.

In just one generation, they have revolutionised the way we live, learn, work and play. They account for approximately half of the productivity growth in modern economies and have radically changed the ways in which people, industry, governments and society interact with each other and with the environment.

This staff working paper sets out the significant contributions that these technologies make towards a renewed social agenda for Europe and identifies the specific activities that the Commission will undertake until the end of 2008 to help ensure citizens' well-being in the information society.

2. INTRODUCTION

Information and communication technology (ICT) has a large impact on society and the economy. ICT has fostered the restructuring of markets and changed the ways we do business, and continues to offer an unprecedented opportunity for innovation. ICT makes a major contribution to economic growth: it accounts for 40% of Europe's productivity growth and 25% of EU GDP growth¹. It makes both a direct and an indirect contribution to growth and competitiveness.

The innovative impact of ICT is also felt in the social sphere. Digital technologies have already empowered millions of citizens and helped socially and geographically marginalised groups become more included and engaged. They facilitate improvements in public services, ensuring equal access to information and promoting democracy. They contribute to improving the environmental performance of other technologies, thereby enhancing our quality of life.

3. THE INFORMATION SOCIETY: A WIN-WIN FOR SOCIAL INCLUSION AND ECONOMIC GROWTH

The technological transformation that is conveyed by the information society makes it possible to respond to our social inclusion needs while presenting opportunities for economic growth. Bridging digital divides and accessibility gaps, or improving digital competences,

¹ European Commission, i2010 — A European Information Society for growth and employment, SEC(2005) 717

translates into new jobs and services. Initial estimates indicate that benefits from e-inclusion in the EU-27 could be between €35 and €85 billion over five years².

The Commission is at the forefront of this effort with its strategy of supporting research and innovation for inclusive ICT for everybody's benefit while establishing a comprehensive policy framework to help address Europe's societal challenges³.

Although there is a clear need to pursue a coherent e-inclusion strategy into the future, these efforts are already delivering results. Individuals and communities are being empowered by ICT to better enjoy traditional as well as new information society services. For example, social, healthcare and consumer services are becoming more easily available and more affordable thanks to higher efficiencies from the use of ICT and the greater adaptability of ICT-enabled services to users' needs. More attention to accessibility features when designing new technologies is allowing disabled people — and increasingly the elderly — to better use information society tools and services to be actively included in society. This is, in turn, increasing the degree of usability of technologies for all.

Additionally, a more empowered society constitutes the best market incentive for the necessary investments in research and innovation for developing the inclusive technologies of the future.

4. PERSISTENT DIGITAL DIVIDES LEAD TO SOCIAL EXCLUSION IN THE KNOWLEDGE SOCIETY

Despite its inclusive potential, the information society can also have negative effects by creating new divides in terms of digital *haves* and *have nots* based on different factors such as education, age, income, geographic and sometimes cultural origin, education or disabilities. It is estimated that 30-40% of people in Europe still do not fully enjoy the benefits of the information society. Those groups with the largest remaining disparities in internet use and digital literacy correspond to categories of people outside the labour force and in an older age bracket, followed by those with low educational attainment. The unemployed, however, have internet use rates which are closer to the population average.

%	Average (EU-27)	Older people (65+)	Economically inactive	Low educated	Unemployed
Internet regular users	51	13	21	31	42
No internet skills	40	82	73	63	45
No computer skills	40	81	71	62	43

Source: Eurostat 2007 Community survey on ICT usage in households and by individuals

Digital divides reinforce social divides in two ways:

² European Commission, COM(2007) 694 & SEC(2007) 1469

³ European Commission, COM(2007) 694

- On the one hand, they put a large part of the population at risk of exclusion from the knowledge society, since only part of the population have access to or use ICT-enabled services efficiently;
- On the other hand, digital exclusion reduces individual life chances for employment, training, and access to quality services and world knowledge, while hampering Europe's ability to develop a fully functional digital economy.

5. TAKING UP THE CHALLENGE OF CITIZENS' WELL-BEING IN THE INFORMATION SOCIETY

An inclusive information society is central to responding to current social challenges as highlighted in the Commission Communication *Opportunities, access and solidarity: towards a new social vision for the 21st Century*⁴. Policies on the information society are aimed at turning current challenges into societal and economic opportunities.

In particular, information society policies in 2008 will contribute to addressing the following societal challenges:

- Demographic change, especially the ageing of Europe's population;
- Better citizens' health through advanced e-health services;
- Digital literacy for equal opportunities for jobs and participation;
- Widespread and affordable access to information society services and technologies; and
- E-accessibility, that is usability of ICT for all, especially for persons with disabilities.

5.1. Taking up the demographic challenge of population ageing

Life expectancy in European societies has dramatically improved: from 43.5 years in 1900 to 74.6 in 2004⁵ and a projected⁶ 84.5 in 2060 for men, and from 46.0 to 80.9 with a projected 89 for women. Thanks to sixty years of peace, medical progress and better living and working conditions, a growing proportion of Europeans are now enjoying longer and more active retirement. This has far-reaching implications on welfare systems, with the associated expenditure expected to rise to 2.5% of GDP by 2030 and 4.3% by 2050. At the same time, access to health services and healthy life expectancy still vary considerably between income groups and regions.

Social risks such as old-age dependency and loneliness are expected to rise as a result of these demographic trends. Today, 28% of the population over 70 currently live alone. Up to two thirds of people over 75 are dependent on informal care, mostly provided by the immediate family, especially women. One in six older people live in poverty, with elderly women particularly exposed to low pensions as a result of incomplete careers.

⁴ COM(2007) 726 final

⁵ Life expectancy is calculated for the EU27 as one region and not as an arithmetic average of the 27 Member States

⁶ Eurostat population projections EUROPOP2008, 2008-based convergence scenario, convergence year 2150

The majority of older people do not yet enjoy the benefits of the digital age — low-cost communications and online services that could support some of their real needs — since only 13% use the internet. Vision, hearing or dexterity problems that tend to increase with age (and affecting 21% of over-50s) frustrate many older people's efforts to engage in the information society.

Within the framework of the Action Plan on Ageing Well in the Information Society⁷ the *Decision establishing the Joint Programme for Research in Ambient Assisted Living (AAL)*⁸ has been adopted on 23 June by Council after earlier adoption by the European Parliament and will be signed into law in July. The Commission will provide some €150 million in EU funding support between 2008-2013 for this new programme of applied research in ICT for independent living of elderly people.

This programme, which is based on a new form of cooperation between Member States under Treaty Article 169, will raise some €600 million for investing in research on information and communications technologies targeted at improving the life of older people at home, in the workplace and in society in general. This new truly European initiative will contribute to allowing older Europeans to stay active for longer and live independently.

With the action plan, the Commission seeks a triple win for Europe: improved quality of life and social participation for older people in Europe, new business opportunities for Europe's industries, and more efficient and more personalised health and social services.

The implementation of this joint applied research programme will place Europe in a leading position in ICT for "ageing well". As ageing is a global phenomenon, a strong industry in Europe will have opportunities worldwide. Furthermore, research activities will focus on the development of more practical and simpler appliances that are easier to understand and use by older and younger unskilled persons and that will finally benefit all.

In Scotland the West Lothian authorities have achieved a dramatic reduction in hospital stays, from 57 days to 9 days, and have reduced costs by a factor of 3 by implementing smart technology packages in existing houses and newly built housing: the gross annual cost for one care-home place stands at €27,740, compared with €9,043 for supporting a community package including tele-care technology, 24-hour response and ten hours of care.

5.2. Better citizens' health through advanced e-health services

The ageing society brings new health and social risks and has far-reaching impacts on health and social protection systems. Across the EU, a vision is emerging of how best to improve citizens' well-being and health in the face of the challenges of ageing and chronic diseases, including those that also affect many youngsters, such as obesity. This new approach has access to quality healthcare as a cornerstone.

In the process of delivering high-quality and sustainable health services, service providers have to deliver "more (services) for less (inputs)". ICT plays a pivotal role in achieving this by improving efficiency and effectiveness of service delivery while providing services that are tailored to the needs of patients and ensure disease prevention. Electronic interoperability of health services is therefore a key element for the portability of health-critical data for

⁷ COM/2007/0332

⁸ COM/2007/0329 final — COD 2007/0116

patients and the provision of pan-European health services, in conformity with the fundamental rights to privacy and data protection.

The current inability for ICT-enabled health systems to seamlessly interconnect and exchange data and services, such as electronic health records, patient summaries, and emergency data sets, is a major obstacle to the widespread take-up of e-health applications in the EU. Encouraging interoperability of electronic health systems at EU level reduces fragmentation of service provision also at national level.

The Commission will adopt in 2008 a *recommendation on cross-border interoperability of electronic health record systems*, contributing to the achievement of a “European health information area”.

The Commission has also proposed a *lead-market initiative fostering the use of ICT in European health systems* and involving all actors in the health value chains. The initiative is highly innovative, responds to customers’ needs, has a strong technological and industrial base in Europe and depends on the creation of favourable framework conditions through public policy measures.

By the end of 2008 the Commission will also propose a communication on telemedicine and innovative ICT tools for chronic disease management, setting out actions to overcome the main barriers preventing wider deployment of telemedicine, in particular tele-monitoring and tele-homecare.

5.3. Empowering EU citizens with digital and media literacy

As the knowledge society becomes pervasive, more and more everyday activities, goods and services will be online. Increasingly, some are only available electronically, be it via the internet, mobile phone, digital TV or other electronic devices. It is therefore essential to ensure every citizen has the opportunity to become digitally literate, in order to effectively participate. Those without sufficient ICT skills suffer from a major disadvantage in the labour market.

A 2007 report by Eurostat⁹ states that 40% of people aged between 16 and 74 in the EU-27 have no basic computer skills. Only 13% of the elderly are reported to use the internet. Gaps in internet and computer skills are still wide, especially for at-risk groups such as those with low education, the economically inactive and the older population. These are also groups that lag further behind in the rate of regular internet usage, and for which the Riga targets¹⁰ of halving by 2010 the digital literacy gap between the groups at risk of exclusion¹¹ and the average EU population are not likely to be met.

Learners need, from an early age, to acquire competences in the information society by reflecting critically on media content and on their learning aims. Schools and educational patterns will have to encourage learners to work autonomously as well as collaboratively while using all the opportunities of new technologies including for disadvantaged students and those with special needs¹². Media literacy is also a key prerequisite for active and full

⁹ Eurostat 2007 Community survey on ICT usage in households and by individuals

¹⁰ http://ec.europa.eu/information_society/events/ict_riga_2006/index_en.htm

¹¹ The unemployed, immigrants, people with low education levels, people with disabilities, and the elderly

¹² COM(2008)425

citizenship. New media are indeed key enablers of freedom of expression, the right to information and they are also instrumental to building and sustaining democracy¹³.

Together with policies set in the area of e-Skills¹⁴, ensuring that there is a clear European policy in place to tackle the challenge of basic digital literacy is a key Commission objective. In November 2007 a Digital Literacy Expert Group was established to provide the Commission with inputs for a Digital Literacy Policy Review¹⁵ and contribute to guidelines on digital literacy actions.

A staff working paper including recommendations on digital literacy will be presented by the end of 2008.

5.4. Access, affordability, e-accessibility for all in the information society

ICT is becoming the main mode of access for many essential economic and social services, training and employment opportunities, and a broad range of information and knowledge needed to live in modern societies. Therefore, ICT needs to be available for all (*access for all*) and usable by all regardless of their location or social and economic background.

5.4.1. Enabling access for all and connecting regional economies

High broadband coverage (availability of DSL broadband networks) and penetration (people subscribing to broadband services) is one of the key enablers for an inclusive society and for economic development. Many ICT services related to health and social care cannot be provided effectively without broadband. Evidence shows that over the last decade, regions that have invested in broadband efficiently have also reaped the economic benefits from ICT in terms of innovation, productivity growth and economic development¹⁶.

On average, at EU-25 level, 94% of the population in urban areas are able to subscribe to a DSL connection, as against 72% of the rural population, who tend to access poorer services at higher cost¹⁷.

In January 2008 on average 20% of the EU-27 population were broadband subscribers, with sharp differences between the higher penetration rates of 30% of the population in Denmark, Finland, the Netherlands and Sweden (maintaining their position as world leaders, well ahead of Korea, the US or Japan) and rates below 10% in several Member States. Evidence also shows that greater broadband penetration and use often correlates with lower access prices for consumers.

The overall competition among different technological platforms shows positive outcomes in terms of availability and affordability of broadband networks, but significant differences persist between Member States.

A number of successful examples of public-private partnerships in broadband projects for underserved areas are delivering encouraging results in Europe. In June 2008 the *Commission*

¹³ A European approach to media literacy in the digital environment - COM(2007) 833 final

¹⁴ COM(2007) 496 final

¹⁵ http://ec.europa.eu/information_society/eeurope/i2010/studies/index_en.htm#literacy.

¹⁶ SEC(2007) 1469

¹⁷ i2010 Mid-Term Review, SEC(2008) 470

launched a web portal aimed at facilitating the exchange of broadband good practices. The portal will also provide an open discussion forum on regulatory aspects, public procurement and strategic issues, including the publication of calls for tender and the facilitation of demand aggregation for deploying broadband networks. During the second half of 2008, the initiative Regions for Economic Change will also contribute to bridging the broadband gap with the launch of a thematic regional network under the Interreg IVC programme, aimed at improving the deployment of broadband in remote and rural areas. These two initiatives will facilitate and improve the €2,2 billion investments for broadband infrastructure under the European Cohesion Policy between 2007 and 2013, of which 82% target less developed regions in Europe.

The *proposal for the revision of the electronic communications regulatory framework*, adopted by the Commission on 13 November 2007, is expected to help regional and social cohesion. The proposal aims to exploit the full potential of radio spectrum resources, and keep pace with technological advances and convergence of technology platforms and services. This means greater flexibility and more efficient use of radio spectrum. In November 2007 the Commission published its strategy for a coordinated EU approach to the use of frequencies which will become available when TV broadcasters switch from analogue to digital transmission by 2012 (the “digital dividend”). This will, in turn, unleash many innovative convergent services including wireless broadband, which is particularly suitable for addressing territorial cohesion in those European regions where difficult geography, population dispersion and other factors often prevent investment by market players.

5.4.2. *The key to a barrier-free knowledge society for all: e-accessibility*

For many people at risk of exclusion due to physical and cognitive disabilities (some 15% of the EU population¹⁸), ICT offers essential tools for overcoming barriers to social and economic integration. Yet many information society tools and services currently cannot be used by people with disabilities (and therefore increasingly by older people, as disability strongly correlates with age), thus precluding their access to the knowledge economy. If ICT is not accessible to them, the resulting social exclusion will be even worse by impeding them the enjoyment of information society content as well as commercial and public services.

e-Accessibility is about the possibilities of using all information and communication technologies and services by people with disabilities and functional limitations, be they permanent or temporary. In doing so, e-Accessibility also facilitates usability of ICT by all.

“Accessible ICT products and services will foster disabled users’ participation in education, employment, culture and society in general. People with disabilities and/or older people represent a significant number, so the integration of the people within the information society will bring both social, cultural and economic benefits”, was the view of one respondent in the June 2007 public consultation about the future EU e-inclusion strategy.

Currently in the EU-27¹⁹:

¹⁸ Commitments on adopting “web accessibility guidelines” in public websites were already included in the Council Resolution on the e-Europe Action Plan 2002: accessibility of public websites and their content (2002/C 86/02)

¹⁹ European Commission, *Riga Dashboard*, SEC(2007) 1470

- Only 5% of public websites comply with the minimum web accessibility standards and guidelines²⁰;
- The percentage of subtitled audio-visual programming varies widely from country to country (from 2.5% to 95% of programming);
- The percentage of sign-language programming is very limited (from less than 0.5% to 5%);
- Broadcasting with audio description ranges from less than 1% to more than 10% of programming depending on countries.

Accessible ICT products and services help address the daily challenges that the many users with visual, hearing, speech, mobility and cognitive impairments face in using the technologies and services of the information society.

Poor market dynamics and fragmented attempts at national level to establish legislation in this area have failed to ensure e-accessibility for a large number of users needing accessible ICT tools and services to enjoy the benefits of the information society.

Within the review of the electronic communications regulatory framework, the Commission has proposed *strengthening e-accessibility requirements in the provision of e-communications services, including accessibility of the single European emergency number 112.*

Moreover, to prepare for a possible legislative measure as announced in the 2007 Communication on the European e-Inclusion Initiative, the Commission is presently consulting with stakeholders on possible *measures towards an accessible information society.* The goal is to improve the accessibility of ICT products and services, so that they are usable by a large range of potential users notwithstanding their disabilities or limitations. This also covers the possible introduction of e-accessibility features in the design phase of new ICT tools and services so as to prevent digital exclusion in future.

5.4.3. Contributing to consumers' welfare

In 2007 European consumers continued to benefit from lower prices, in particular for mobile voice services. These gains have been supplemented by the increased availability of offerings such as mobile broadband and higher-speed fixed services, in particular over optical fibre. Most EU markets have seen increasing volumes and falling prices and the average European consumer of electronic communications services was better off in 2007 than the year before²¹.

The Commission has remained vigilant and, in areas where the market has failed to deliver lower prices and better value, it has intervened. In 2007 the Roaming Regulation²² tackled high prices for EU voice roaming services.

The consumer markets scoreboard²³ will allow the Commission to monitor market outcomes for consumers. The evidence in the scoreboard will help us better to take into account consumer interests. A specific survey on consumer switching behaviour, including for digital

²⁰ WCAG 1.0 <http://www.w3.org/TR/WCAG10/>

²¹ i2010 Mid-Term Review, *op. cit.*

²² Regulation (EC) No 717/2007

²³ European Commission 2008, The Consumer Markets Scoreboard: Monitoring consumer outcomes in the Single Market

services, will identify the options consumers have in the market and their ability to exercise their right to choose different service providers.

The proposals for the review of the electronic communications regulatory framework, adopted by the Commission on 13 November 2007, aim to strengthen consumers' and users' rights, with a view to improving accessibility and promoting an inclusive, trustworthy and secure information society. Its objectives are:

- Strengthening and improving consumer protection and users' rights in the electronic communication sector by — among other things — giving consumers more information about prices and supply conditions, and facilitating access to and use of e-communications, including emergency services, for disabled users; and
- Enhancing the protection of individuals' privacy and personal data in the electronic communications sector, in particular through provisions related to security of personal data and improved enforcement mechanisms.

In May 2008 the Commission launched a consultation on the functioning and effects of the EU Roaming Regulation, including developments in prices for roamed SMS and data services. The Commission will report to Council and Parliament in 2008.

Furthermore, the i2010 Mid-Term Review Communication *Preparing Europe's digital future*²⁴, states that users' rights and obligations in the digital environment are of crucial importance, and *will be addressed in late 2008 in a guide for consumers*.

5.4.4. Enhancing safety and confidence in the internet

The number of children using online technologies is increasing globally. The possibilities for interactivity and participation in the online environment can improve the quality of life for many young people. However, this also means that they may have to make choices that they would not normally have to make, in many cases related to their own safety and protection including protection of their privacy and personal data. Protecting children from harmful content (such as child abuse material) and conduct (such as grooming²⁵ and cyber-bullying²⁶) online, curbing the distribution of illegal content and enhancing protection of their privacy and personal data by developing Privacy Enhancing Technologies (PETs) are a continuing concerns for policy makers, law makers, industry and end-users, particularly parents, carers and educators.

As results from Eurobarometer surveys on data protection in 2003²⁷ (in 15 Member States) and in 2008²⁸ (in 27 Member States), EU citizens are worried about data security on the internet. A large majority of respondents (82%) considered that data transmission over the internet was not sufficiently secure, while only 15% of respondents trusted data security transfers. The majority of respondents also indicated that they were not familiar with

²⁴ COM(2008) 199 final

²⁵ When minors are contacted by people who will befriend them in order to commit sexual abuse

²⁶ When minors are victims of bullying in the online environment

²⁷ http://ec.europa.eu/public_opinion/archives/ebs/ebs_196_data_protection.pdf and

http://ec.europa.eu/public_opinion/flash/fl147_data_protect.pdf

²⁸ http://ec.europa.eu/public_opinion/flash/fl_226_en.pdf and

http://ec.europa.eu/public_opinion/flash/fl_225_en.pdf

technologies limiting collection of personal data through the internet (such as firewalls and cookie filtering).

Since 1996, the *Safer Internet programmes* have been a major feature of the Commission's activity in the protection of children in the information society. These programmes have in recent years established a European network of hotlines/reporting points where members of the public can report illegal content, a European awareness-raising network and Safer Internet Days coordinated by the network, information for parents through independent testing of effectiveness of filtering software, and support for industry self-regulatory initiatives in the area of content rating and mobile phones.

On 27 February 2008 the Commission adopted a proposal for a new Safer Internet programme 2009-2013. The new programme will take into account future challenges in the online environment, encompassing recent web 2.0 developments, such as social networking. This new programme will fight illegal content as well as harmful conduct such as grooming and bullying. Final adoption of the programme by Council and Parliament is expected in early 2009.

5.4.5. Redesigning public services

The goal of public administrations is to deliver information and services in easy and accessible ways through a multi-channel approach combining the use of the internet, the telephone or digital television, while including face-to-face support via an intermediary (practitioners acting as "public agents"). This multi-channel approach to e-government aims to deliver personalised, combined and flexible services to citizens and businesses in a more efficient and effective way.

People who are socially disadvantaged for economic, geographic, physical or other reasons also tend to rely most heavily on public social services and have the most to gain from e-government. Yet they are less likely to be able to access e-government services directly, owing to multiple socially excluding factors. An inclusive, multi-channel approach is therefore of prime importance.

As part of the 2006 e-Government Action Plan²⁹, the Commission is supporting efforts by Member States to ensure that "by 2010 all citizens, including socially disadvantaged groups, become major beneficiaries of e-government"³⁰. To this end, current efforts focus on the exchange of information on multi-channel e-government initiatives and best practices and on support for pilot schemes amongst Member States and regions.

Electronic identification systems (e-IDs) are making it easier for increasing numbers of Europeans to access online services such as enrolling at university, submitting tax returns, claiming unemployment benefits and checking pension entitlements. However, e-IDs are still seldom recognised when crossing European borders since most e-ID systems do not work across Member States. For this purpose the Commission is working on the creation of a EU-wide interoperable system for recognition of e-IDs and authentication that will enable people

²⁹ *i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All*, COM(2006) 173

³⁰ Ministerial Declaration, eGovernment Conference, Lisbon, 19 September 2007

to use their national electronic identities in any Member State³¹. This will increase the opportunities for economic and social participation for all throughout Europe³².

5.4.6. *Towards more participatory governance*

Sound governance and good government are enhanced by greater participation of citizens in the decision-making and legislative processes, contributing to greater democratic social cohesion. The e-Government Action Plan³³ and the 2007 Lisbon Ministerial Declaration³⁴ committed to demonstrate, by 2010, tools for effective public debate and participation in democratic decision-making. In the three years since the European Parliament asked the Commission to launch the e-Participation Preparatory Action, projects have demonstrated concrete cases in which, with the help of modern ICT tools and applications, the legislative process and the resulting legislation can be improved through active participation of the public in the decision-making process. To enhance this, the Commission is supporting the exchange of information and good practice cases based on Member States' national initiatives as well as funding research and innovation projects within the Competitiveness and Innovation Programme as well as the 7th Framework Programme for Research and Technology Development in ICT.

³¹ The **STORK project (Secure idenTity acrOss boRders linKed)** has been funded under the **Competitiveness and Innovation Framework Programme**

³² *i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All*, COM(2006) 173

³³ *i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All*, COM(2006) 173

³⁴ Ministerial Declaration, eGovernment Conference, Lisbon, 19 September 2007