# Digital Agenda for Europe: what would it do for me?

(see also IP/10/581 and MEMO/10/200)

An ambitious Digital Agenda for Europe has just been presented by the European Commission outlining seven priority areas for action: creating a digital Single Market, greater interoperability, boosting internet trust and security, much faster internet access, better investment in research and development, enhancing digital literacy skills and inclusion, and applying information and communications technologies to address challenges facing society like climate change and the ageing population. In these seven areas, the Digital Agenda foresees some 90 follow-up actions, of which 27 would be legislative. The Digital Agenda is the first of the flagship initiatives under the Europe 2020 strategy for smart, sustainable and inclusive growth (see IP/10/225). Overall, the Digital Agenda focuses on the 21st century technologies and online services that will enable Europe to boost job creation, promote economic prosperity and improve the daily lives of EU citizens and businesses in a wide variety of ways. Some practical examples of exactly how the measures to implement the Digital Agenda stand to benefit people and businesses are outlined below.

# Consumers: a vibrant digital Single Market and high-speed internet access

The digital world should be at people's finger tips! But at the moment too many people in Europe find themselves stuck in the internet slow-lane because the digital Single Market is under-developed, people don't have the confidence to go online or because people don't even have access to a high-speed internet connection.

Consumers still cannot take full advantage of competitive prices and a wide range of choice available in a European Digital Single Market. It is often easier to buy something online from a business based in the United States than in another EU country. For example, up to 60% of attempts to buy something online from another EU country run into difficulties such as your credit card payment being refused because it comes from the "wrong" country. Another example is that consumers can buy CDs in every music shop across Europe, but they are often unable to download music online legally from another EU country because rights are licensed on a country by country basis. Such fragmentation means that there are four times as many legal music downloads in the US as in the EU. There is also the fact that only 12 % of EU web users feel completely safe making online transactions

As for telecommunications, despite EU measures on roaming, consumers are currently still dissuaded from using mobile phone services when abroad by the higher prices paid compared to using the same services in their own Member State, particularly in the case of data roaming.

The European Digital Agenda aims to tackle these problems so as to give people access to all the potential advantages of the digital society.

For example, it would aim to ensure **very fast internet access** that will help enable citizens to shop, create, learn, socialise and interact online and is also essential for the economy to grow. The European Digital Agenda's target is to bring internet connections of 30 Mbps or above for all Europeans by 2020 with half European households subscribing to connections of 100 Mbps or higher.

The Digital Agenda will also encourage EU coordination in radio spectrum management in order to boost the growth of innovative wireless broadband services. It will set clear rules to foster investment in open and competitive new generation networks and will help public authorities to roll out new broadband infrastructure in places where geography or a limited number of potential customers make it difficult for the market or private investment alone to offer high speed internet (e.g. rural areas).

The Digital Agenda aims to find solutions for **pan-European access to legal online content** by simplifying copyright clearance, management and cross-border licensing. It will also promote large scale digitisation of the rich collections of national libraries, archives and museums, and promote access to them through *Europeana* (www.europeana.eu), the portal of Europe's digital libraries (see MEMO/10/166).

Other actions in this area include making **electronic payments and invoicing easier** anywhere in Europe to encourage cross-border online shopping.

To help Europeans feel safer online, the Digital Agenda will strengthen **EU rules on personal data protection,** improve the eYou guide (<u>http://ec.europa.eu/information\_society/eyouguide/index\_en.htm</u>) - the digital guide to rights online - to make it more practical and user-friendly, and propose the creation of an EU-wide online resolution system for eCommerce transactions.

The Digital Agenda also aims to boost people's confidence to use the internet by *inter alia* ensuring a better coordinated European response to cyber-attacks, identity theft and spam.

Following an investigation into the costs of the absence of a Single Market in telecoms, the Commission intends to take further measures with the objective of, for example, ensuring that the difference between roaming and national prices should approach zero by 2015.

#### Workers - right skills for the digital era

Today Europe is suffering from a growing ICT skills shortage. 150 million Europeans – some 30% - have never used the internet and Europe's educational and training systems have not kept up with the ICT skills needed in today's digital job market. **The Digital Agenda aims to increase and upgrade the digital skills of all EU citizens** irrespective of age, location or economic situation so that they can participate fully in the digital society and the job market.

There is also a huge untapped potential in the millions of young people and millions of women of all ages who are regular ICT users and who could be attracted to a job in the ICT or technology sector. This massive pool of potential talent and resources needs to be tapped for European growth and competitiveness. The Digital Agenda will aim to make sure that all citizens, especially young people, are made aware of the potential of ICT for all kinds of professions. The EU will call on Member States to make digital literacy and competences a priority for the European Social Fund.

For people already using ICT skills and working in the technology sector, the Digital Agenda will help identify and recognise the competences of ICT practitioners, so that the industry in need of employees with particular ICT skills can easily identify them.

### Patients and doctors - using ICT for sustainable healthcare

Investing in digital technologies related to healthcare, also known as eHealth, can dramatically improve the range and quality of care available to Europe's patients and medical specialists. For instance, new telemedicine services such as online medical consultation and portable devices that monitor the health condition of people suffering from chronic disease and disabilities have the potential to offer a freedom of movement that patients have never enjoyed.

In practical terms, eHealth can minimise the risk of medical errors and help the early detection of health problems. Home telemonitoring of heart patients can improve survival rates by 15%, reduce hospital days by 26% and save 10% in nursing costs – vitally important in tough economic times. ePrescriptions can reduce errors in drugs dosage by 15%. eHealth will be critical to keep health care affordable and accessible to all in the ageing societies of Europe.

The Digital Agenda aims to provide Europeans by 2015 with **secure access to their online medical health records** not just at home but also when they are travelling anywhere in the EU. This would facilitate the work of doctors and enable patients to get the best help if they are seeing a doctor at home or in another EU country.

# Manufacturing industry – the opportunities of an interoperable digital economy

The ICT sector contributes dramatically to overall productivity growth in the European economy as a whole (half of European productivity growth over the past 15 years was already driven by information and communications technologies - see IP/10/571- and this trend is likely to accelerate).

In an ideal world, digital services and devices would work together and communicate with each other perfectly. However, this is not the situation today. We have many devices and software interfaces that do not interoperate as well as they could, leading to fragmented markets and a lack of competition. We also have standardisation processes that do not always keep pace with technological change. Together, these problems make the integrated use of technologies very difficult and mean that online services, including public services, still often force users to work with specific software or devices, leading to a risk of lock-in and higher prices. Such barriers also prevent manufacturing industry from developing innovative products and services and potentially block badly-needed economic growth and jobs.

To tackle these problems, the Digital Agenda foresees **a review of EU standardisation policy** by 2010 that will in particular address the need of European ICT standardisation to keep pace with fast-moving technology markets. Furthermore the Commission will issue guidance on the rules for standard-setting, public procurement of ICT solutions and interoperability.

#### The ICT industry -research and innovation for the digital economy

The Digital Agenda aims in particular to tackle the major problem of underinvestment and fragmentation in Europe's ICT research. Europe's ICT expenditure in research and development (R&D) stands at only 40% of US expenditure. This is a strategic weakness considering that ICT is the most important enabling technology in the modern economy. The Digital Agenda will aim to leverage more private investment through the strategic use of pre-commercial procurement and public-private partnerships, by means of EU regional and other funding for research and innovation and by maintaining the pace of yearly increases of the EU's ICT R&D budget established in European research framework programmes, at least until 2013.

The ICT industry also faces a significant lack of highly skilled ICT professionals to meet its current and future job requirements. The European Digital Agenda is addressing this problem by encouraging ICT education and proposing measures to increase its attractiveness for career development. The availability and better preparedness of ICT professionals will encourage the sound growth of the industry, whose development largely depends on the skills and competences of people.

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# Small and medium-size enterprises (SMEs) – eGovernment to ease the functioning of SMEs

The Digital Agenda aims to **cut red tape** and remove the barriers which prevent 99% of all European businesses from taking full advantage of the opportunities available in the Digital Single Market. One of the Digital Agenda's overall goals is that 33% of SMEs should conduct online purchases or sales by 2015.

In particular, **completing the Single European Payment Area (SEPA) will make it easier for SMEs to conduct electronic payments and invoicing** across national borders based on safe and efficient payment methods.

The Digital Agenda's commitment to improve the functioning of eGovernment aims to ensure that SMEs can spend less time on administrative procedures and gain new business opportunities. In particular, fully implementing EU legislation on eProcurement, practical eldentification and eAuthentication for cross-border services would open up numerous new business opportunities across borders. By 2011, EU countries should agree on a common list of key cross-border public services (e.g. electronic certificates needed to qualify as a contractor in procurement processes) which would enable entrepreneurs to set up and run a business anywhere in Europe independently of their location. These key services should be available fully online by 2015.

#### Artists, authors, musicians

The internet is a unique platform for distribution of cultural content by creating opportunities for authors, composers and artists to reach larger audiences. Europe needs to push rapidly ahead with the creation, production and distribution of digital content. This requires a fully functional European Digital Single Market and better protection of authors' and other creators' remuneration.

For some areas of content, Europe's online Single Market is currently fragmented because rights management is organised on a national basis, so that a pan-European online music and video store would have to negotiate rights individually with different rights management bodies for each of the 27 Member States. The result is that although European consumers can for instance buy CDs in every shop, they are often unable to buy music from legal online platforms across the EU because rights are licensed on a national basis. Currently, potential revenues for creators are lowered because European citizens that want to access creative and cultural content cannot do so because they have no legal means to access such work. It is a paradox that pirated content circulates much more freely in Europe than legal content. There is a need for a balanced solution; creative industries should be stimulated to offer more content online in return for better legal protection. **The Digital Agenda wants to tackle these problems by stimulating cross-border and pan-European licensing in the digital environment**. This will be done *inter alia* through a new framework Directive on collective rights management due for 2011, a proposal for a Directive on orphan works and continued discussions with stakeholders on out-of-print works, and by reviewing EU rules on the Re-Use of Public Sector Information. The need for other measures will be assessed in 2012 following a 2010 Green Paper on the opportunities and challenges of online distribution of audiovisual works and other creative content.

### The environment – using ICT to reduce our environmental footprint

Europe's global leadership to tackle climate change has paved the way forward with an ambitious energy and climate change policy that sets out to reduce greenhouse gas emissions by at least 20% by 2020. The full potential of ICT tools to help citizens and businesses reduce their own carbon footprint must be fully unlocked to help the EU to meet its global commitments.

ICT monitoring solutions such as smart grids and meters that analyse energy consumption can improve energy savings in the office and at home. Lighting accounts for nearly 20% of electricity consumption worldwide. About 70% of this could be saved by using efficient ICT-based smart light management systems. Under the Digital Agenda by 2020, there should be a **20% reduction in energy use on lighting compared to 2010.** 

The Digital Agenda aims to ensure that public authorities, the ICT industry and major emitting sectors closely work together to accelerate the massive roll-out of ICT-based solutions to meet its energy saving goals.

## Researchers – increased and joined-up ICT research funding

Europe's underinvestment in ICT related research and development threatens the European manufacturing and service sectors (mainly automobile, consumer appliances, health and medical). The investment gap is mainly due to weak R&D spending (less than €5.5 billion per year), excessive red tape and market fragmentation.

In the Digital Agenda, the Commission has committed to leverage more private investment through the strategic use of pre-commercial procurement. The Commission will also support six ICT-based public-private partnerships in the EU's seventh framework programme for research (FP7) with total EU funding of  $\leq$ 1 billion and leveraging around  $\leq$ 2 billion of private spending. It will also maintain the pace of yearly increases of the ICT R&D budget, at least until 2013The Digital Agenda invites EU Member States to double annual total public spending on ICT R&D by 2020 to  $\leq$ 11 billion.

The Digital Agenda for Europe also includes measures to cut back on excessive paperwork so that young researchers and SMEs have lighter and faster access to EU research funds in ICT starting in 2011 and to reinforce coordination and pooling of resources with Member States and industry.

## Children and their parents: being safer online

Young people and children are the most active group using the internet today: 73 % of people aged 16 to 24 regularly use advanced services to create and share online content, twice the EU average (35 %). 66% of all Europeans under 24 use the internet every day, compared to the EU average of 43 %. However, although these young people may feel totally at home online, they are still vulnerable to online threats.

The Digital Agenda will help parents and their children keep safe online. In particular, through the Safer Internet programme, all EU countries will be encouraged to set up hotlines for reporting offensive online content and offer teaching online safety in schools. Providers of the online services that are most popular among the younger generations (e.g. social networks, mobile phone operators) will be asked to further develop self-regulatory measures regarding online safety for children by 2013.

Finally, the Digital Agenda proposes to reinforce cooperation at European and international levels to combat cybercrime (e.g. alert platforms online at national and EU levels to tackle sexual exploitation and dissemination of child sexual abuse material online) and other forms of cyber attacks, identity theft and spam.

#### Older and disabled people – new opportunities

In an ageing society especially, eHealth is a key area for innovation that can deliver better results for disabled or elderly people.

For example, thanks to EU funding, **Ambient Assisted Living** (AAL) technologies put ICT into action to ensure that the digital society permits a more independent and dignified life for people who are frail or suffer from chronic conditions and for persons with disabilities.

The AAL programme promotes innovation and the deployment of ICT in areas such as fall prevention (this affects more than one third of people over 65 in the EU) or to support the more than 7 million EU citizens who suffer from dementia, memory loss, lack of attention or the inability to solve small problems. **The Digital Agenda will aim at doubling the take-up of independent living arrangements for the elderly by 2015.** 

150 million Europeans – some 30% - have never used the internet. This group is largely made up of people aged 65 to 74 years old. Accessibility and usability are also problems for Europeans with disabilities. Bridging this digital divide can help members of disadvantaged social groups to participate on a more equal footing in the digital society (including services of direct interest to them such as eLearning, eGovernment, eHealth) and increase their employability and quality of life.

#### People in rural and remote areas- connecting communities

The Digital Agenda's objective is to bring broadband internet to all, even to people living in isolated areas by 2013. However, the high costs of building new infrastructures combined with the low density of demand means that telecoms companies are deterred from installing the necessary broadband infrastructure.

To tackle this problem the EU will work with Member States to reinforce and better target regional and other funding programmes to support investment and adopt measures lowering investment costs. The Digital Agenda also foresees proposals to ensure that part of the digital dividend – the radio frequencies freed up by the move from analogue to digital broadcasting – can be used for wireless broadband technologies. This is particularly important because wireless (terrestrial and satellite) broadband is not only opening up exciting new services but will be crucial to the provision of fast internet for all, including remote and rural regions.

To promote the development of broadband networks, the European Commission will propose an ambitious **European Spectrum Policy Programme** later this year to increase the efficiency of radio spectrum management and maximise the benefits for consumers and industry.