Digital Agenda for Europe: key initiatives
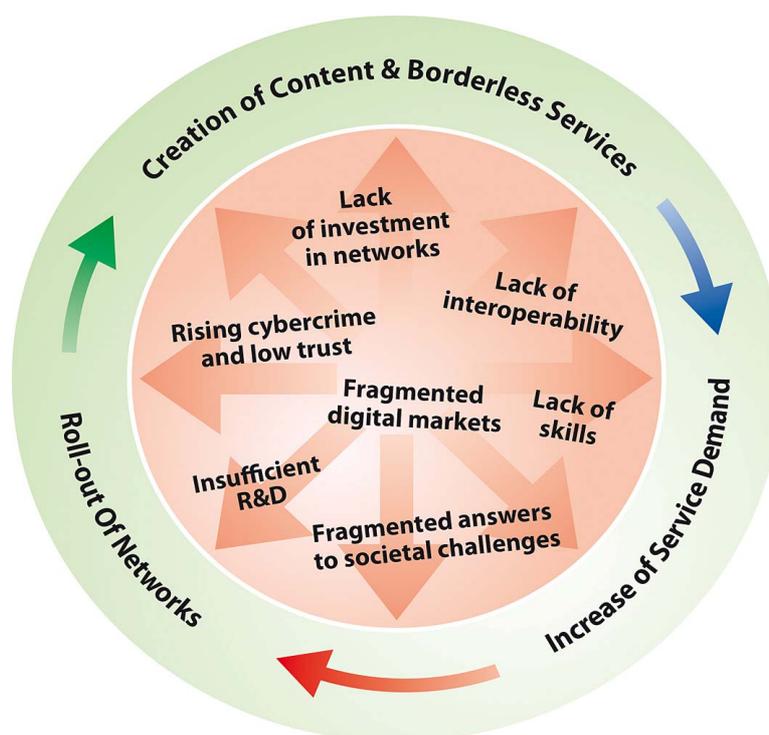*(see also [IP/10/581](#) and [MEMO/10/199](#))*

Why a Digital Agenda for Europe?

Europe needs a new action plan for making the best use of information and communication technologies (ICT) to speed up economic recovery and lay the foundations of a sustainable digital future. The new action plan proposes to remove current obstacles to maximising the potential of ICTs, with long-term investments to minimise future problems.

30% of Europeans have never used the internet. There are four times as many music downloads in the US as in the EU because of the lack of legal offers and fragmented markets. Europe is also lagging behind its industrial partners such as the US and Japan on investment in ICT research and take-up of ultra high-speed networks. Only 1% of Europeans have access to fibre-based high-speed networks, as compared to 12% Japanese and 15% South Koreans. The EU is spending only 40% of US levels for ICT research and development.

Europe needs to tackle these challenges to create a virtuous cycle in which ICT stimulates the EU economy. This can happen when attractive services are made available in a borderless online environment and their availability and use creates demand for faster internet. This demand for faster internet, in turn, creates investment opportunities in faster networks. When put in place and widely used, the faster networks open the way for even more innovative services.

The Digital Agenda identifies where Europe needs to focus its efforts to put this virtuous cycle in motion.

What is the focus of the Digital Agenda?

The Agenda outlines seven priority areas for action:

- creating a Digital Single Market
- improving the framework conditions for interoperability between ICT products and services
- boosting internet trust and security
- guaranteeing the provision of much faster internet access
- encouraging investment in research and development
- enhancing digital literacy, skills and inclusion
- applying ICT to address social challenges such as climate change, rising healthcare costs and the ageing population.

What key actions does the European Commission propose?

Digital Single Market

It is time for a new Single Market to deliver the benefits of the digital era.

Europe is still a patchwork of national online markets, and Europeans are prevented from enjoying the benefits of a digital Single Market. Commercial and cultural content and services need to flow across borders; this should be achieved by eliminating regulatory barriers and facilitating electronic payments and invoicing, dispute resolution and customer trust. More can and must be done under the current regulatory framework to put in place a Single Market in the telecoms sector.

The Digital Agenda will for example:

- Stimulate the music download business (where the EU is now only at 25% of the US level) by **simplifying copyright clearance, management and licensing.** *Inter alia*, by the end of 2010, the Commission will propose a framework Directive on collective rights management to enhance the governance, transparency and pan European licensing for (online) rights management. The situation will be reassessed in 2012, following a Green Paper later this year.
- Fix a date for moving to a **Single Market for online payments**. Currently, only 8% of those in the EU who shop online buy from another country and 60% of attempted cross-border internet shopping orders fail due to technical or legal reasons such as refusal of non-domestic credit cards.
- Foster private and public e-commerce by **modernising eSignature rules** in 2011 so that **secure e-authentication** is interoperable and recognised across borders.
- Strengthen citizens' rights and enhance their confidence by **updating** the **EU's data protection regulatory framework** by the end of 2010.

The European Commission will also make sure consumers are protected in cyberspace by issuing a **digital code that summarises the rights of citizens in the online world** in a clear and accessible way. Currently many consumers find it difficult to know what their digital rights are, especially when these are scattered across various complex legal documents.

Other actions under the Digital Agenda will aim to give consumers the confidence that they can get a fair deal online. The Commission will pursue the idea of **EU online trustmarks, notably for retail websites** and will propose an **EU-wide online dispute resolution system** for eCommerce transactions, so that consumers know where to go when things go wrong.

Interoperability and standards

We need effective interoperability between IT products and services to build a truly digital society.

The internet is the best example of the power of technical interoperability. Its open architecture has brought interoperable devices and applications to billions around the world. But to reap the full benefits of ICT deployment in Europe, it is essential to enhance the interoperability between devices, applications, data repositories, services and networks.

The framework conditions for interoperability can be improved in various ways. One important means to that end is to ensure that good ICT standards are available and used, notably in public procurement and legislation.

The Digital Agenda will for example:

- Propose legal measures to reform the rules on **implementation of ICT standards** to allow the use of certain ICT fora and consortia standards.

But the Commission will also address situations in which standards do not help because significant market players do not support them. A further aim is better coordination between public administrations through a new European Interoperability Strategy and Framework to ensure interoperability between eGovernment and other public services across Europe.

Trust and security

Europeans will not embrace technology they do not trust - the digital age is neither "big brother" nor "cyber wild west".

Europeans will not engage in ever more sophisticated online activities unless they feel that they, and their children, can fully rely upon their networks. It is essential to address the rise of "cybercrime" - ranging from child abuse to identity theft and cyber-attacks, and develop responsive mechanisms.

In parallel, the multiplication of databases and new technologies raise new challenges. The right to privacy and to the protection of personal data are fundamental rights in the EU which must be effectively enforced online and offline.

The internet has now become such a critical information infrastructure, for both for individuals and for the European economy as a whole, that our IT systems and networks must be made resilient and secure to all sort of new threats.

The Digital Agenda will for example:

- Set up a European **rapid response system to cyber-attacks**, including a network of Computer Emergency Response Teams (CERTs) and propose in 2010 a reinforced role for the European Network and Information Security Agency (ENISA).
- Propose tougher laws to **combat cyber attacks against information systems** in 2010 and make proposals by 2013 on related rules on jurisdiction in cyberspace at European and international levels.

The European Commission will also support **hotlines where children and parents could report illegal content online** and work with EU countries to offer teaching online safety in schools.

Under the EU's updated telecoms rules, operators and service providers are obliged to notify breaches of personal data security (see [MEMO/09/568](#)). The ongoing review of the EU's general data protection framework will also explore a possible extension of the obligation to notify data security breaches.

Fast and ultra fast internet access

We need very fast internet for the economy to grow strongly and to create jobs and prosperity, and to ensure citizens can access the content and services they want.

Europe needs widely available and competitively-priced fast and ultra fast internet access. The EU aims to bring basic broadband to all Europeans by 2013 and to ensure that, by 2020, (i) all Europeans have access to much higher internet speeds of above 30 Mbps and (ii) 50% or more of European households subscribe to internet access above 100 Mbps.

To reach these ambitious targets it is necessary to develop a comprehensive policy, based on a mix of technologies, focusing on two parallel goals: on the one hand, to guarantee universal broadband coverage (combining fixed and wireless) with internet speeds gradually increasing up to 30 Mbps and above. On the other hand, the goal is, over time, to foster the deployment and take-up of next generation access networks (NGA) in a large part of the EU, allowing ultra fast internet connections above 100 Mbps.

The Digital Agenda will for example:

- Ensure that by 2020 **all Europeans can have access to much faster internet**, as set out in the EU targets. In 2010 The European Commission will present a communication on broadband which will lay out a common framework for actions at EU and Member State level, including exploring how to attract capital for investment through credit enhancement (backed by the EIB and EU funds), an ambitious European Spectrum Policy Programme and a Recommendation to encourage investment in competitive Next Generation Access networks.

Research and innovation

Europe must invest more in R&D and ensure our best ideas reach the market.

Given that ICT contributes to the total value-added in European industrial strengths such as automobile (25%), consumer appliances (41%) or health and medical (33%), the lack of investment in ICT R&D threatens the entire EU manufacturing and service sectors.

The investment gap is related, firstly, to weak and dispersed public R&D effort. For instance, the EU public sector spends less than € 5.5 billion per year on ICT R&D, far below the levels of competing economies. Secondly, market fragmentation and widely dispersed research funding limit the growth and development of ICT innovative businesses, notably SMEs. Thirdly, Europe is slow in the uptake of ICT-based innovations. While social changes like an ageing population or environmental crisis are major drivers of innovation, Europe makes little use of procurement of innovation and R&D to improve quality and performance of its public services.

To tackle these problems, the Digital Agenda will for example:

- **Leverage more private investment** through pre-commercial procurement and public-private partnerships, by the use of structural funds for research and innovation and by maintaining a pace of 20% yearly increase of the ICT R&D budget at least for the duration of the 7th Framework Programme for Research (FP7).

The Commission will also develop **'light and fast' ways for SMEs and young researchers to access EU funding for ICT research.** The Commission has also urged EU Member States to double annual public spending on ICT R&D from €5.5 billion to €11 billion (including EU programmes) in ways that will leverage an equivalent increase in private spending from €35 billion to €70 billion.

Digital skills, literacy and e-inclusion

The digital era should be about empowerment and emancipation; background or skills should not be a barrier to accessing this potential.

As more daily tasks are carried out online, from applying for a job to paying taxes or booking tickets, using the internet has become an integral part of daily life for many Europeans. Over half of Europeans (250 million) go online every day but 150 million Europeans – some 30% - have never used the internet. Often they say they have no need or that it is too expensive. This group is largely made up of people aged 65 to 74 years old, people on low incomes, the unemployed and the less educated.

In addition, Europe is suffering from a growing professional ICT skills shortage and could lack the competent practitioners to fill as many as 700,000 IT jobs by 2015.

These failings are excluding many citizens from the digital society and economy and are holding back the positive impact that ICT can have on productivity growth.

To tackle these problems, the Digital Agenda will for example:

- Bridge the digital skills gap by promoting greater coordination of ICT skills initiatives at Member State level, especially by proposing **digital literacy and competences** as a priority of the European Social Fund.
- Promote the supply and demand of ICT skills in the labour market by developing tools by 2012 to identify the competences of ICT practitioners and users, so that companies seeking employees with particular ICT skills can easily compare their skills .

The Commission, based on a review of options, will also make proposals by 2012 to ensure that **websites providing public services are accessible to all citizens**, including the elderly and persons with disabilities, by 2015.

ICT-enabled benefits for society

Smart use of technology and exploitation of information will help us to address the challenges facing society like climate change and the ageing population.

Using and applying ICTs is critical to help Europe face future challenges such as supporting an ageing society, climate change, reducing energy consumption, improving transportation efficiency and mobility, empowering patients and ensuring the inclusion of persons with disabilities.

To tackle these problems, the Digital Agenda will for example:

- Ensure that the **ICT sector leads the way on reporting its greenhouse gas emissions**, by making sure that by 2011 a common methodology has been adopted, opening the way for other energy intensive sectors to follow.
- Set-up wide-scale pilot actions that **give Europeans secure online access to their medical health data** so that wherever they are, they can also give doctors access to their medical record.
- Increase safety and medical assistance to Europeans, for instance in an emergency abroad, by defining a **minimum set of health information to be included on patient records** that can be accessed electronically anywhere in the EU.
- Improve online access to the wealth of European cultural heritage by proposing a **sustainable model for financing for the EU public digital library Europeana** and for digitising Europe's culture works.
- Make e-Government an everyday convenience for European citizens and businesses by establishing a **list of common cross-border services** that allow businesses and citizens to operate independently or live anywhere in the EU and by setting up systems of mutual recognition of electronic identities.

These and many more actions make the Digital Agenda an ambitious action plan for the coming years.

When will the Digital Agenda be put into practice?

The announcement today identifies a raft of measures that will be put into place or proposed over the next 2-3 years, leading to follow-up actions up to 2015. The initiative will then evolve and develop over the next 10 years, as a flagship of the Europe 2020 Strategy to reach the 2020 targets.

Will the European Commission implement the Digital Agenda alone? How can stakeholders help?

To turn this ambitious programme into reality the European Commission will work closely with the European Parliament (through regular dialogue) and Member States (through a group of high level representatives), and all interested stakeholders at all levels in all Member States. The Commission will organise action-oriented stakeholder platforms, as well as an annual Digital Assembly to assess progress and emerging challenges.

Annex 1: Key actions

	Planned delivery date
A vibrant digital Single Market	
Key Action 1: Simplify copyright clearance, management and cross-border licensing by:	
• Enhancing the governance, transparency and pan-European licensing for (online) rights management by proposing a framework Directive on collective rights management	2010
• Creating a legal framework to facilitate the digitisation and dissemination of cultural works in Europe by proposing a Directive on orphan works, to conduct a dialogue with stakeholders with a view to further measures on out-of print works, complemented by rights information databases	2010
• Reviewing the Directive on Re-Use of Public Sector Information, notably its scope and principles on charging for access and use.	2012
Key Action 2: Ensure the completion of the Single Euro Payment Area (SEPA), eventually by binding legal measures fixing an end date for migration and facilitate the emergence of an interoperable European eInvoicing framework through a Communication on eInvoicing and by establishing a multistakeholder forum	2010
Key Action 3: Propose a revision of the eSignature Directive with a view to provide a legal framework for cross-border recognition and interoperability of secure eAuthentication systems	2011
Key Action 4: Review the EU data protection regulatory framework with a view to enhancing individuals' confidence and strengthening their rights	2010
Interoperability and standards	
Key Action 5: As part of the review of EU standardisation policy, propose legal measures on ICT interoperability to reform the rules on implementation of ICT standards in Europe to allow use of certain ICT fora and consortia standards	2010
Trust and security	
Key Action 6: Present measures aiming at a reinforced and high level Network and Information Security Policy, including legislative initiatives such as a modernised European Network and Information Security Agency (ENISA), and measures allowing faster reactions in the event of cyber attacks, including a CERT for the EU institutions	2010
Key Action 7: Present measures, including legislative initiatives, to combat cyber attacks against information systems by 2010, and related rules on jurisdiction in cyberspace at European and international levels by 2013	2010 2013
Fast and ultra fast internet access	
Key Action 8: Adopt a Broadband Communication that lays out a common framework for actions at EU and Member State to meet the Europe 2020 broadband targets, including:	2010
• Reinforce and rationalise, in this framework, the funding of high-	2014

	Planned delivery date
speed broadband through EU instruments (e.g. ERDF, ERDP, EAFRD, TEN, CIP) by 2014 and explore how to attract capital for broadband investments through credit enhancement (backed by the EIB and EU funds);	
• Propose an ambitious European Spectrum Policy Programme in 2010 for decision by the European Parliament and the Council that will create a co-ordinated and strategic spectrum policy at EU level in order increase the efficiency of radio spectrum management and maximise the benefits for consumers and industry	2010
• Issue a Recommendation in 2010 to encourage investment in competitive Next Generation Access networks through clear and effective regulatory measures	2010
Research and innovation	
Key Action 9: Leverage more private investment through the strategic use of pre-commercial procurement and public-private partnerships , by using structural funds for research and innovation and by maintaining a pace of 20% yearly increase of the ICT R&D budget at least for the duration of FP7	_
Enhancing digital literacy, skills and inclusion	
Key Action 10: Propose digital literacy and competences as a priority for the European Social Fund regulation (2014-2020)	_
Key Action 11: Develop tools to identify and recognise the competences of ICT practitioners and users, linked to the European Qualifications Framework and to EUROPASS and develop a European Framework for ICT Professionalism to increase the competences and the mobility of ICT practitioners across Europe	2012
ICT-enabled benefits for EU society	
Key Action 12: Assess whether the ICT sector has complied with the timeline to adopt common measurement methodologies for the sector's own energy performance and greenhouse gas emissions and propose legal measures if appropriate	2011
Key Action 13: Undertake pilot actions to equip Europeans with secure online access to their medical health data by 2015 and to achieve by 2020 widespread deployment of telemedicine services	2015-2020
Key Action 14: Propose a Recommendation defining a minimum common set of patient data for interoperability of patient records to be accessed or exchanged electronically across Member States	2012
Key Action 15: Propose a sustainable model for financing the EU public digital library Europeana and digitisation of content	2012
Key Action 16: Propose a Council and Parliament Decision to ensure mutual recognition of e-identification and e-authentication across the EU based on online 'authentication services' to be offered in all Member States (which may use the most appropriate official citizen documents – issued by the public or the private sector)	2012

Annex 2: Key Performance Targets

These indicators are mainly drawn from the Benchmarking framework 2011-2015[1] endorsed by the EU Member States in November 2009.

1. Broadband targets:

Basic broadband for all by 2013: basic broadband coverage for 100% of EU citizens. (Baseline: Total DSL coverage (as % of the total EU population) was at 93% in December 2008.)

Fast broadband by 2020: broadband coverage at 30 Mbps or more for 100% of EU citizens. (Baseline: 23% of broadband subscriptions were with at least 10 Mbps in January 2010.)

Ultra-fast broadband by 2020: 50% of European households should have subscriptions above 100Mbps. (No baseline)

2. Digital Single Market:

Promoting eCommerce: 50% of the population should be buying online by 2015. (Baseline: In 2009, 37 % of the individuals aged 16-74 ordered goods or services for private use in the last 12 months.)

Cross-border eCommerce: 20% of the population should buy cross border online by 2015. (Baseline: In 2009, 8 % of the individuals aged 16-74 ordered goods or services from sellers from other EU countries in the last 12 months.)

eCommerce for business: 33% of SMEs should conduct online purchases/sales by 2015. (Baseline: During 2008, 24% and 12% of enterprises was, respectively, purchasing/selling electronically, for an amount equal to or greater than 1% of the turnover/total purchases.

Single Market for telecoms services: the difference between roaming and national tariffs should approach zero by 2015. (Baseline: In 2009, the roaming average price per minute was 0.38 cents (call made) and the average price per minute for all calls in the EU was 0.13 cents (roaming included).

3. Digital inclusion:

Increase regular internet use from 60% to 75% by 2015 and from 41% to 60% for disadvantaged people. (Baseline figures are for 2009)

Halve the proportion of population that has never used the internet by 2015 (to 15%). (Baseline: In 2009, 30% of individuals aged 16-74 had never used the internet.)

4. Public services:

eGovernment by 2015: 50% of citizens using eGovernment, with more than half of them returning filled in forms. (Baseline: In 2009, 38% of individuals aged 16-74 had used eGovernment services in the last 12 months, and 47% of them used eGovernment services for sending filled forms.)

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[1] For more information see Benchmarking framework 2011-2015; This is a conceptual framework for collection of statistics on the information society as well as a list of core indicators for benchmarking.

Cross-border public services: by 2015 online availability of all the key cross-border public services contained in the list to be agreed by Member States by 2011. (No baseline)

5. Research & innovation:

ICT R&D increase: Double public investment to €11 billion. (Baseline: ICT government budget appropriations or outlays on R&D (ICT GBAORD) was 5.7 billion nominal euros in 2007.)

6. Low Carbon Economy:

Promotion of low energy lighting: By 2020 at least 20% overall reduction in energy use on lighting. (No baseline.)