European Commission

THE EUROPEAN
UNION
EXPLAINED

Rebooting
Europe's
economy

Digital agenda for Europe

The digital agenda for Europe will help Europe's citizens and businesses to get the most out of digital technologies

THE EUROPEAN UNION EXPLAINED

This publication is a part of a series that explains what the EU does in different policy areas, why the EU is involved and what the results are.

You can find the publications online:

http://europa.eu/pol/index_en.htm

http://europa.eu/!bY34KD

How the EU works
Europe in 12 lessons
Europe 2020: Europe's growth strategy
The founding fathers of the EU

Agriculture
Banking and finance
Borders and security
Budget
Climate action
Competition
Consumers
Culture and audiovisual
Customs
Digital agenda ✖
Economic and monetary union and the euro
Education, training, youth and sport
Employment and social affairs
Energy
Enlargement
Enterprise
Environment
Fight against fraud
Food safety
Foreign affairs and security policy
Humanitarian aid and civil protection
Internal market
International cooperation and development
Justice, fundamental rights and equality
Maritime affairs and fisheries
Migration and asylum
Public health
Regional policy
Research and innovation
Taxation
Trade
Transport

CONTENTS

....

....

Why we need a digital agenda for Europe

The policy challenge

The digital economy is growing at seven times the rate of the rest of the economy, but this potential is currently held back by a patchy pan-European policy framework. Europe is lagging behind many other regions when it comes to the fast, reliable and connected digital networks which underpin economies and every part of our business and private lives. When communicating between countries in Europe, citizens currently face varying charges for use, incompatible systems and irregular connectivity across the continent. This is harmful for every citizen, business and innovator in Europe.

Launched in May 2010, the **digital agenda for Europe** is aimed at boosting Europe's economy by delivering sustainable economic and social benefits from a **digital single market**.

Even though 250 million Europeans use the Internet daily there are still millions of them that have never used the Internet at all! People living with disabilities face particular difficulties in enjoying the benefits of new electronic content and services. As ever more daily tasks are carried out online, everyone needs enhanced digital skills to participate fully in society.

The digital economy also presents opportunities — if citizens are ready to take them. The number of jobs that require information and communications technology (ICT) skills is expected to rise by 16 million by 2020. And 90 % of jobs will require basic information technology skills by 2015.

Some facts and figures

— *The Internet economy creates five jobs for every two 'offline' jobs lost.*
— *The EU digital economy is growing at 12 % each year and is now bigger than the Belgian national economy.*
— *There are more mobile phone subscriptions in the EU than people.*
— *There are 7 million jobs in the ICT sector in Europe*
— *It is estimated that half of productivity growth derives from investment in ICT.*

© asife/Shutterstock.com
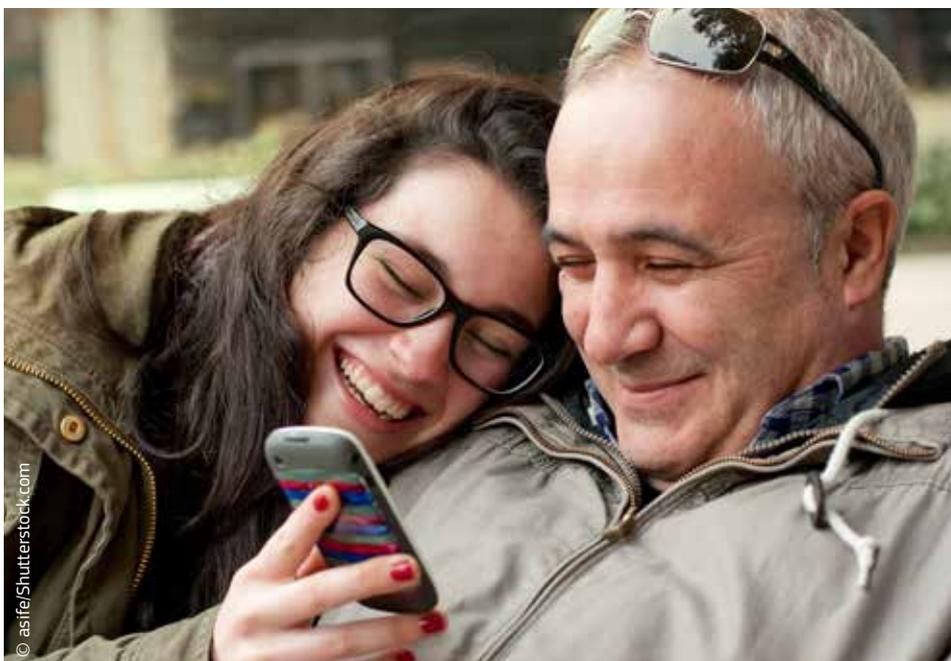
Digital technology is part of everyday life for most Europeans — but not all … yet!

How the EU goes about it

Meeting the targets

Every year the European Commission publishes the digital agenda scoreboard. Data for 2014 show that EU citizens and businesses are going online more, shopping more and have greater confidence and skills in ICT. The Commission has so far completed 72 of 101 actions under the digital agenda for Europe. A further 23 are scheduled for completion by their deadline. Six actions have been delayed or are at risk of being delayed. The data also show that people in the EU often lack the high-speed broadband — especially in rural areas — to satisfy their digital appetite, and the looming digital skills gap is still a big problem.

Every home and business in Europe will enjoy high speed broadband access.

Broadband	EU average	
	2014	Target
Basic broadband coverage for all	100 %	100 % (2013)
Digital single market		
Population buying online	47 %	50 % (2015)
Cross-border e-commerce	12 %	20 % (2015)
Small to medium-sized enterprises (SMEs) selling online	14 %	33 % (2015)
Digital inclusion		
Regular Internet use	72 %	75 % (2015)
Regular Internet use by disadvantaged people	57 %	60 % (2015)
Population never having used the Internet	20 %	15 % (2015)
Public services		
Citizens interacting online with public authorities	42 %	50 % (2015)
Citizens returning filled-in forms to public authorities electronically by 2015	21 %	25 % (2015)

What the digital agenda for Europe consists of

Challenges

BROADBAND: DIGITAL OXYGEN FOR ALL

The digital economy is growing at seven times the rate of the rest of the economy and much of this growth has been fuelled by broadband Internet. The development of high-speed networks today is having the same impact as the development of electricity and transportation networks a century ago. Achieving the digital agenda targets would clear the way to innovative services such as e-health, 'smart' cities and data-driven manufacturing.

The European Commission is boosting the spread of high-speed broadband by bringing forward new rules on cost reduction, a recommendation on next generation access networks, revised state aid guidelines for broadband and a proposal to complete the telecoms single market and deliver a #ConnectedContinent.

A REDESIGNED EUROPEAN TELECOMS SECTOR

A single telecoms market will mean economies of scale in the telecoms sector, higher productivity in other economic sectors thanks to more efficient cross-border connectivity, affordable cross-border prices, more innovation and diversification in products and services. The main elements of the #ConnectedContinent proposal are: open Internet, reinforced consumer rights, no extra charges for roaming in the EU, coordinated spectrum assignment and certainty for investors.

A CONSUMER-FRIENDLY DIGITAL SINGLE MARKET

Tech start-ups are booming in Europe; the EU app economy provides €17.5 billion in revenues and 1.8 million jobs. The European Commission's StartUpEurope action plan strengthens the business environment for web and ICT entrepreneurs in Europe, helping them to get the resources they need and contributing to innovation, growth and jobs.

At this time, e-commerce remains insufficiently developed in the EU. Consumers have difficulties accessing online shops, and businesses find it hard to offer their services in other EU countries.

The digital agenda for Europe will modernise EU rules on the digital single market to make e-commerce easier. The Commission's 2012 e-commerce action plan aims to double the volume of e-commerce in Europe by 2015 with initiatives to streamline postal delivery, facilitate card, electronic and mobile payments, and increase trust in online shopping through a strategy to improve Internet security in Europe and better protect against cyberattacks.

Replacing paper invoices with e-invoices across the EU could lead to roughly €240 billion in savings over a 6-year period, according to studies. The intention is that e-invoicing will become the predominant method of invoicing in Europe by 2020. The public sector could save up to €1 billion per year if all invoices were submitted in electronic format.

Data released by the European Commission in May 2014 show that even though more people are going online, almost 50 % of the population have insufficient digital skills for today's work environment.

This skills gap persists at a time when more ICT specialists are needed than ever before, and ICT-related jobs are being created much more quickly than employment in other sectors. To tackle this issue, the European Commission has convened the Grand Coalition for Digital Jobs. Coalition partners pledge to take specific action to increase ICT training, attract young people to ICT education or help modernise ICT education. Depending on their area of expertise, partners pledge to create new training programmes or offer jobs and internships, to promote coding to youngsters and so on.

The digital agenda for Europe will make digital technology available for all.

Basic **coding** skills will also be needed for many jobs in the near future. More than 90 % of professional occupations nowadays require some ICT competence. Moreover, ICT practitioners are a key pillar of the modern workforce across all sectors of the European economy, with demand growing annually by 3 % and the number of graduates from computer science not keeping pace. As a result, many open vacancies for ICT practitioners cannot be filled, despite the high level of unemployment in Europe. If Member States do not act at a European and national level, they face a shortage of up to 900 000 ICT professionals by 2020.

How can a digital agenda help in our daily lives?

The digital agenda's aim is not only to get every European online, but also to help people find their way in the digital world. Computers, mobile phones and digital technologies are a central part of our daily lives, and can address many of the challenges we face, from **safety on the roads** to a healthier old age and from better public services to a sustainable environment.

A smart city is a place where the traditional networks and services are made more efficient through the use of digital and telecommunication technologies, for the benefit of its inhabitants and businesses. The EU is investing in research and innovation and developing policies to improve the quality of life of citizens and make cities more sustainable in view of Europe's **2020 targets**. The Commission made available approximately €200 million for smart cities and communities in the 2014–15 budgets of the Horizon 2020 research and innovation programme, to accelerate progress and enlarge the scale of roll-out of smart cities solutions. There will also be possibilities to access the European Structural and Investment Funds.

Europeans live longer than ever, and because of new and expensive treatments, the costs of health and social care will rise substantially to about 9 % of the EU's gross domestic product in 2050. ICT can contribute by providing European citizens with better, cheaper and higher quality services for health, social care and **ageing well**. The introduction of information and communications technologies and telemedicine alone is estimated to improve the efficiency of healthcare by 20 %. Moreover, ICT empowers users of every age to better manage their health. The Commission is investing in **e-health** initiatives that will be critical to keep healthcare affordable and accessible to all in the ageing societies of Europe.

Some facts and figures

— *Home telemonitoring of heart patients can improve survival rates by 15 %, reduce hospital days by 26 % and save 10 % in nursing costs.*
— *E-prescriptions can reduce errors in drugs dosage by 15 %.*

Leading in European digital research, development and innovation

Digital research and innovation will drive Europe's future prosperity and quality of life. As a whole, the ICT sector represents nearly 5 % of the EU economy and generates 25 % of total business expenditure; investments in ICT account for 50 % of all European productivity growth. The EU's current **ICT research programme** focuses, among other areas, on:

- **robotics**: making the most of this growing market through a public–private partnership between public authorities, industry and academia, it will improve EU industrial competitiveness through robotic technologies, provide robots and robotic services to help solve some of the EU's societal challenges, such as ageing, address ethical and legal issues and develop strategic goals;

- **components and systems**: funding key technologies essential for tomorrow's products and services, including support for electronics, cyberphysical systems, advanced computing, smart manufacturing, future lightning, photonics and more.

Some facts and figures on robotics

— *The global robotics market is worth €15.5 billion a year, €3 billion of it in the EU.*
— *The EU has a 25 % share of the global industrial robotics market and 50 % of the professional service robotics sector.*
— *The number of people over 65 years old in the EU will rise to over 30 % by 2060. 'Eldercare social robots' can help perform daily tasks such as lifting or cooking or set off an alarm if an inbuilt camera registers that a person has fallen.*
— *A new robotics public–private partnership will receive €700 million of EU funding, leveraging €2 billion in private investment.*

Outlook

The global economy is changing fast. In the digital age, the race for innovation, skills and markets forces all our countries to anticipate and adapt in order to thrive. The European Council of June 2013 underlined the role of the digital agenda in the EU by:

· reiterating its call to complete the digital single market by 2015;

· pointing to the need to address overdue investment needs in telecoms infrastructure;

· calling for the promotion of the right skills for the modern economy;

· stressing the importance of working with our partners to fight cybercrime.

In addition, the Commission will come forward with proposals to complete the digital single market, notably by:

· adding more ambition to the ongoing reform of our telecoms rules, modernising copyright rules taking full account of Europe's rich cultural diversity;

· modernising and simplifying consumer rules for online and digital purchases;

· creating a harmonised approach to radio spectrum between Member States;

· supporting the deployment of a high-quality, digital network infrastructure, underpinning all sectors of the economy across borders, progressively on a continental scale;

· contributing to activities that turn digital research into successful European innovation stories, encouraging entrepreneurship and providing a framework that drives start-ups, the take-up of new businesses and job creation;

· developing and implementing measures to make Europe more trusted and secure online, so that citizens and business can fully reap the benefits of the digital economy.

© dotshock/Shutterstock.com

The digital agenda for Europe will contribute significantly to the EU's economic growth and spread the benefits of the digital era to all sections of society.

Further reading

▶ **Twitter**: @DigitalAgendaEU

▶ **Facebook**: DigitalAgenda

▶ **YouTube**: youtube.com/user/DigitalAgendaEU

▶ **Pinterest**: pinterest.com/eucommission/connectedcontinent

▶ **Digital Agenda for Europe**: http://ec.europa.eu/digital-agenda

▶ **Questions about the European Union?**
Europe Direct can help: 00 800 6 7 8 9 10 11 — http://europedirect.europa.eu

Publications Office