

A connected Digital Single Market State of play and the way forward

SUMMARY

Information and communication technologies and the digital economy have the potential to improve Europe's productivity and create growth and jobs. The EU has been making efforts to help create a more integrated European digital economy since the mid-1990s. In 2010, the Commission added new momentum to the process, and with the launch of the Digital Agenda set out to reap the benefits of a digital single market for households and businesses.

Despite a relatively high level of implementation of the actions on the Agenda and the adoption of numerous legislative initiatives, the Digital Single Market remains fragmented into 28 national markets, and the EU continues to lag behind its main international competitors.

The new European Commission recognised these shortcomings and the potential of the internet economy to help Europe recover from the crisis, and so placed completion of the Digital Single Market high on its agenda to the extent that there is now a dedicated project team of 13 Commissioners. In its 2015 Work Programme, the Commission outlined its intentions to conclude work on key pending proposals and table new legislative and non-legislative initiatives in this promising but challenging policy field, however to what extent tangible results will be achieved remains to be seen.



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Context

The economic opportunities created by the digital/internet economy and the underlying information and communication technologies are significant. They have the potential to boost Europe's growth rate and help it to recover from the crisis. According to an OECD [study](#), the internet economy has now reached the stage where it has become a considerable source of growth itself with the potential to boost the whole economy. Various [studies](#) have attributed between 10% and 20% of GDP growth in mature developed economies to the digital economy, with a constantly increasing share over time. The Commission [estimates](#) the sector's growth rate to be seven times that of the rest of economy.

Information and communication technologies (ICT) offer great economic potential: they [lower](#) costs for both private companies and governments, increase access to new markets and facilitate starting of businesses. Some [experts](#) say that SMEs present on the web and using online marketing grow four times faster than those without a internet presence and that those businesses which have a digital dimension generate more revenue and have higher profitability than their non-digital peers. In particular, through being [able](#) to create jobs and generate revenues the ICT sector has fared far better in the crisis than many traditional industries.

However, many argue that the potential of information and communication technologies as a driver of jobs and growth is far from being fully exploited in the EU. There is general consensus that the Digital Single Market (DSM) continues to be fragmented. This means that the additional economic growth, new jobs, increased investment and innovation which would all be unlocked with a fully fledged DSM remain unrealised.

The scale of this untapped potential may be illustrated by comparison with the US. The impact of ICT-related investment and productivity¹ on GDP growth has been [roughly](#) twice as high in the US as in EU in the period 1995 to 2007. Since the financial and economic crisis began in 2008 this trend has strengthened, with Europe's ICT contributing less to growth than pre-crisis, and US ICT increasing its impact on growth. The EU's labour productivity gap has [widened](#) from 89% of US levels in 1995 to 74% in 2013. Many studies [confirm](#) that ICT's contribution to growth in Europe is lower than in the US and that this directly leads to the EU's lower levels of productivity and economic growth. Furthermore, digital economy companies in the US constitute a substantial part of the 500 biggest companies and offer a much larger [number](#) of digital jobs than European companies (80% of Europe's digital jobs are in companies founded before 1950, and there are very few digital firms among Europe's biggest companies; conventional telecoms firms are not amongst these as they are small due to a long history as national monopolies).

The European Single Market has more consumers than the US market and fully unlocking its digital dimension offers enormous growth possibilities. Estimates vary: the Commission says [implementation](#) of EU measures to complete the DSM could create 3.8 million new jobs and reduce the costs of public administration by 15-20%. Others [see gains](#) of at least 3 to 4 per cent of EU GDP by 2020. An assessment by the European Added Value Unit (EAVU) of the European Parliament [shows](#) potential long-term gains of a fully realised DSM to be as much as 6% of GDP, with the possibility to achieve 2.6% annual GDP growth in the shorter term. However, the benefits of a DSM go far beyond

the GDP gains. Some studies [predict](#) that the resulting increase in productivity would allow European firms to grow to scale and boost their global competitiveness, while fostering entrepreneurship and innovation would help SMEs grow. A DSM could also rationalise and [improve](#) the way businesses and public [administrations](#) are organised, and lead to an increase in the number of globally successful European digital firms which are knowledge-intensive and invest heavily in research and development. For consumers, a completed DSM would [mean](#) enjoying more choices, better quality and lower prices in an enlarged and easily accessible market. Achievement of a fully fledged DSM is therefore considered one of the most promising but challenging policy areas in the EU.

State of play

The EU has been making efforts to help create a more integrated European digital economy since the mid-1990s. Before 2010, EU Directives had been adopted in the fields of e-money, e-commerce, e-invoicing, e-privacy, data protection, distance selling, copyright and digital music rights.² The pace has been somewhat reduced since 2005 with fewer legislative proposals being tabled up to 2010, when the 'Digital Agenda for Europe', established as one of seven flagship initiatives of the Europe 2020 strategy, introduced new momentum to updating the Single Market rules for the digital era.

Its first objective was to create a genuine DSM through simplifying copyright clearance and management, and cross-border licensing, facilitating electronic payments and invoicing, and harmonisation of radio-spectrum allocation. This was to be completed by 2015, and the October 2013 European Council underlined the need to complete the DSM within the original deadline. Progress is measured in annual Digital Scoreboards, the latest of which [shows](#) that the Commission is on track to complete 95 of 101 actions by 2015. Progress on reaching the Digital Agenda targets presents a more mixed picture however.³

Some of the key actions to achieve the DSM have gained in prominence through being included in Single Market Acts I and II. They have all been agreed by the Council and the EP. Over the past five years the EU has adopted legislation on, for example, reducing the cost of broadband networks, broadband funding, copyright, e-procurement, roaming charges, radio spectrum, enhancing trust in e-transactions, online dispute resolution, and consumer rights.⁴ Nonetheless some major legislative proposals of the Barroso II Commission, such as the proposed regulation for a single market for electronic communications, the regulation and directive on personal data protection, the directive on network and information security and the directive on accessibility of public bodies' websites still remain under discussion in the Council.

Despite some legislative progress a genuine DSM is far from reality, and in many aspects the system remains one of 28 national markets. Analysis of the Commissions' [actions](#) to complete the DSM reveals persistent problems such as the separation of telecoms along national borders, disparate regulations for electronic communications and contract law,

Uneven picture across the EU

The level of advancement towards the digital economy varies across the EU. The northern European countries generally lead the way in major indicators such as the size of e-commerce and online services, SMEs buying online, cross-border online shopping, uptake of e-government and level of internet usage. Eastern European countries (in some instances with the exception of the Baltic States) and southern European countries are often below the EU-average but had a lower starting level. Furthermore, across the EU there are big differences between urban and rural areas (the so-called 'digital divide') with the latter lagging behind especially in terms of availability of infrastructure.

impaired cross-border transferability of online content and audiovisual products due to national licensing agreements, a varying degree of data and consumer protection, limited use of e-payments and e-invoices due to different regimes governing their use such as divergent VAT rules, inconsistent implementation of the already agreed rules across the Member States, and a frequent inability of legal frameworks to keep up with fast-paced developments on digital markets. In addition, the Commission [identified](#) some framework conditions such as state aid, tax systems, venture capital financing for enterprises, intellectual property regimes and e-skills gaps as not fully fit for maximising competitiveness and investment.

Juncker Commission's vision of the DSM

The common understanding of the completed DSM is that of an EU market on which a company can function without constraints just as it would on a national market. This is however only part of the definition: many advocate that if this market is to drive growth and jobs and increase productivity it needs to be supported by investments in ICT technologies and infrastructure, and in an e-skilled workforce and consumers. For the Commission, the notion of what is needed to achieve the DSM and how important it is continues to expand over time. The Digital Agenda attributed one of six pillars⁵ and 28 out of 101 actions to the completion of the DSM. The idea of a 'connected DSM' as presented by Commission President Jean-Claude Juncker encompasses more pillars of the Digital Agenda and appears to reorganise the priorities slightly. Furthermore, the College of Commissioners has been structured to give more prominence to the DSM, with one of the six Vice-Presidents, Andrus Ansip, directly responsible for the DSM and steering and coordinating the work of 12 other Commissioners involved⁶ in a project-oriented approach, so that tangible results may be delivered in this challenging and cross-cutting policy field. The priorities of the new Commission are:⁷

- Breaking down national silos in telecoms regulation (for instance, by making the ongoing reform of telecom rules more ambitious), in copyright and data protection legislation and in the management of radio spectrum,
- finalising data protection reform and preparing a reform of the e-privacy directive,
- making taxation and competition rules conducive to a higher level of public and private investment and adapting the application of competition rules to DSM,
- making companies subject to the same level of consumer rules and modernising and simplifying consumer rules for online and digital purchases,
- abolishing roaming charges,
- designing a framework that drives creation of innovative start-ups and promoting creative industries,
- helping developments such as the cloud, internet of things and big data thrive in the EU,
- building the framework conditions for protecting citizens online including through the fight against cybercrime,
- Mobilising additional public and private investment for digital infrastructure,
- Promoting digital and e-government approaches in national and EU administrations and increasing digital skills.

For Juncker, completing the DSM is a [tool](#) which can create growth and jobs without spending public money. He is supported in this belief by some [economists](#) who see the biggest potential in digitalisation of the services sector, responsible for 70% of the European economy. They envisage the creation of a 'virtuous circle' in which a DSM stimulates consumer and business demand, 'which drives innovation through adoption

of digital technologies, which supports productivity growth and GDP, which then creates the demand for jobs, which generate the income for consumers to obtain the products and services being produced'. The Commission is preparing a strategy to complete a DSM focusing on six strands: building trust and confidence, removing restrictions, ensuring access and connectivity, building the digital economy, promoting e-society and investing in world-class ICT research and innovation. The European Council, on 18 December 2014, [asked](#) the Commission to present an 'ambitious communication' for the digital single market, 'well ahead of the June 2015 European Council'.

Advancing the DSM

On 16 December 2014, the Commission presented its [2015 Work Programme](#) to the EP. A connected DSM is second of its 10 main priorities. The plan announces a **DSM Package** aiming to 'ensure that consumers enjoy cross-border access to digital services, create a level-playing field for companies and create the conditions for a vibrant digital economy and society'. The programme outlines the Commission's intention to conclude work on key pending proposals and to table new legislative and non-legislative initiatives.

Creating a single European market for telecoms

The telecoms market remains fragmented along national borders in terms of its structure, consumer pricing, network access fees and radio spectrum allocation. [Estimates](#) show that this costs the EU €110 billion or 0.9% of GDP. European telecoms lag behind the international competition with regard to investment and deployment of modern infrastructure.

In September 2013, the European Commission [proposed](#) the Connected Continent package which aims to remove the obstacles to a genuine single market for telecoms, and incentivise the sector to invest in new technologies and services. The proposal seeks to reduce administrative burdens related to gaining authorisation to operate, coordinate radio-spectrum assignment at EU level, and increase network capacity. It also aims at the elimination of roaming charges.

The EP has [voted](#) to enshrine the principle of net neutrality (processing data communications over a network in the same way, regardless of sender, recipient, application or content) in law, and limit instances where it could not be respected. However, the Connected Continent proposal has been stalled in the Council where its 14 chapters have reportedly been reduced to two: roaming and net neutrality, with the latter weaker than the EP position. Telecommunications network operators [argue](#) that the proposal may not achieve its goals, and considers that relaxing [merger](#) rules, lighter regulation and allowing those telecoms firms to freely [set prices](#) are the real drivers for investment in the sector. These arguments are hotly debated by their [challengers](#), who believe more, rather than less, competition (more players on the market) will bring about desired market changes. At present, the prospects for telecoms legislation remain uncertain – the Connected Continent proposal is being narrowed down, while the new Commission [announced](#) its intentions to give more ambition to the reforms and 'complement the telecommunications regulatory environment' in 2015.

Modernising European data protection rules

A proposal for updating the EU's 19-year old data protection rules was tabled in 2012. In March 2014 after extensive negotiations the EP [adopted](#) its amendments to the original proposal, strengthening safeguards for personal data transferred to non-EU countries. The new rules were designed to better protect data on the internet through measures

such as the right to have personal data erased, limiting 'profiling' (analysis based on automated processing of personal data), the obligation to explain privacy policies in clear and plain language, and the requirement to obtain explicit consent before processing someone's personal data.

The proposal has divided the Member States over numerous issues such as the [choice](#) of legal instrument and the 'one shop stop' [concept](#) (one pan-European authority to deal with disputes). Critics predict high costs for implementing the new rules, [while](#) supporters say the benefits of a simplified system will outweigh the costs. Legal analysts [argue](#) that it is unclear whether the original proposals will be watered down during the negotiations and that their relative simplicity seems already to have been eroded. The Commission aims for the conclusion of negotiations in 2015. Taking into consideration the entrenched positions of Member States, the EP's rapporteur Jan Philipp Albrecht, (Greens/EFA, Germany) [reportedly](#) considers adoption of the rules before 2016 unlikely.

Enhancing cyber-security

The numbers of security breaches and cyber-attacks are on the rise⁸. Recognising cyber-threats during his EP hearing, Commission Vice-President Ansip underlined that, once adopted, the Network and Information Security Directive would be the cornerstone of EU's cyber-security strategy. The directive would require the Member States to adopt a security strategy and improve their cooperation and obliges the operators of critical infrastructures (such as energy, transport and financial services) to take appropriate steps to manage security risks, as well as notify national competent authorities about serious incidents. The EP's amendments reduced the scope of sectors subjected to reporting (originally social networking, for instance, was included) and defined more precisely the conditions under which a report should be prepared.

The EP and Council remain [divided](#) over a number of issues, such as scope (national decisions on who is covered or whether to include all companies in a sector concerned), as well as detailed provisions on Member States' cooperation and incident notification. Some IT and business leaders have [argued](#) that the proposal is not clear enough on how it will fit with national laws, while legal analysts underlined the importance of striking a [balance](#) between encouraging better exchange of information and creating unnecessary burdens to businesses.

Apart from working towards the conclusion of negotiations on the directive, the Commission announced that it will make new proposals in the field of cyber-security during 2015.

Copyright reform

According to former Commissioner Neelie Kroes, the EU copyright [framework](#) is fragmented, inflexible, and often lags behind technology. The Commission launched a public consultation on reviewing and modernising EU copyright rules in 2013. A summary [report](#) showed polarised opinions on multiple topics particularly among consumers and authors, performers and publishing houses. These stakeholders disagreed on issues such as restrictions faced by end-users when attempting to resell previously purchased digital files, problems when

Geo-blocking

Geo-blocking is the practice of preventing users from viewing websites and downloading content based on their location. It is mainly used to differentiate pricing for the same goods. Its opponents argue that geo-blocking encourages piracy, [enables](#) price discrimination and contributes to fragmentation of the DSM. Proponents [claim](#) that geo-blocking increases total content supply and diversity, lowers the prices for some markets and encourages competition. Vice-President Ansip strongly opposes geo-blocking and committed to work towards its [abolishment](#) in Europe.

trying to access content services across borders, and the need to reform EU copyright rules altogether (the copyright industry and audiovisual sector [seem](#) to support maintaining the *status quo*, whereas the IT sector and users favour major reform). Some observers [argue](#) that similar divisions are reflected in the Council, where the positions of Member States are strongly polarised. Due to the controversy around the subject the planned White Paper has reportedly been [suspended](#).

The level of ambition of the new Commission's copyright reform remains to be seen. Researchers propose two courses of action for adapting the copyright regime to the digital era: replacement of national rules with a [unitary](#) EU copyright law, or undertaking [smaller reforms](#) conducive to innovation and productivity growth by, for instance, harmonising national laws or simplifying online licensing across the EU. The [analysis](#) of the European Parliamentary Research Service shows that even though evidence supports a more balanced modernisation rather than profound overhaul of rules, there exists the risk of new legislation being obsolete due to the fast pace of changes in online trends. The DSM package intended for 2015 is expected to [contain](#) a copyright reform proposal.

Consumer rights

In June 2014, the new Consumer Rights Directive entered into force. It increased a number of consumer rights (such as rights to return merchandise) in situations where contracts are concluded off-premises, such as online shopping. However, an EP [study](#) sees the coverage of the directive limited to specific areas of contract law, whereas a wide range of discriminatory practices faced by consumers when shopping online are not addressed by legislation. This room for improvement has also been underlined by Vice-President Ansip who strongly supports [advancing](#) digital consumer rights over the next five years: this will be done by ensuring full implementation of the Consumer Rights Directive but also by new legislative proposals aiming to simplify and modernise rules for online purchases and digital products (possibly [seeking](#) a common minimum set of rules applying to all European online consumers) which was announced in the 2015 Commission Work Programme.

Other issues

A number of other initiatives were mentioned in the Commission's 2015 Work Programme, the exact content of which remains unknown apart from some hints given during the Commissioners' hearings in the EP. These include facilitating e-commerce (for instance, by making postal services support rather than hampering pan-EU e-

Investment in digital networks

Evidence [shows](#) that broadband penetration increases economic growth. At least €200 billion of annual investment is [required](#) to reach the Digital Agenda 2020 broadband goals. The telecoms industry [invests](#) about €45-50 billion, but even adding other sources of funding (e.g. national spending, European Investment Bank funding) the estimated gap is about €60 billion annually. The new Commission sees more private investment as the basis for creating more ultra-speed broadband infrastructure and closing this gap. The Connecting Europe Facility budget, which was partially going to fund broadband deployment has been [reduced](#) from €9 billion to €1 billion in the 2014-29 Multiannual Financial Framework, which was [criticised](#) by many stakeholders.

During his EP hearing, Ansip expressed hope to secure for digital purposes (notably broadband infrastructure) €35 billion from the [Investment Package](#) which could be leveraged to €130 billion. Some economists [argue](#) that the roll-out of broadband infrastructure is only possible with significant public funding. Many [question](#) whether substantial funds will be mobilised with the Investment Package, and as such it remains to be seen how the EU will fare on its 2020 broadband coverage [targets](#).

commerce), and mainstreaming digitalisation across policy areas (possibly by careful examination of the digital aspects of all legislative proposals in drafting).

Further reading

[Productivity and digitalisation in Europe](#), Bart van Ark, The Lisbon Council, May 2014.

[The Cost of Non-Europe in the Single Market, Part III – Digital Single Market](#), European Added Value Unit, EPRS, September 2014.

[The new Juncker Commission: The Digital Agenda](#), Colin Blackman and Andrea Renda, Centre for European Policy Studies (CEPS), September 2014.

[The Digital Infrastructure as the next 'EU Grand Project'](#), Andrea Renda, Istituto Affari Internazionali, January 2014.

[Economic rationale for a Digital Single Market](#), Fabian Zuleeg, Robert Fontana-Reval, European Policy Centre, 2014.

Endnotes

- ¹ Productivity means here both gains in ICT production and the gains resulting from ICT use.
- ² For a detailed overview of the 1995-2010 period refer to a [study](#) by Copenhagen Economics entitled 'The economic impact of the European Digital Single Market'.
- ³ The Digital Agenda set 13 targets to be achieved by either 2015 or 2020. The 2014 assessment shows that one has been achieved (broadband coverage for all), four are likely to be achieved, six unlikely to be achieved and two too early to determine. The main weaknesses include low availability of access to high-speed broadband in rural areas (18%), only 14% of SMEs selling online, low take-up of e-government services by population (42%) and a low level of public investment in research and development on ICT.
- ⁴ For a detailed overview of the 2010-2014 period refer to the European Parliamentary Research Service's [briefing](#) on the Hearing of Vice-President Ansip and an EP Policy Department [study](#) on the Roadmap to DSM.
- ⁵ The other six pillars were the lack of interoperability and insufficient standards, user trust and cyber-security, access to fast and ultra-fast broadband infrastructure, investment in research and innovation, enhancing digital literacy skills and inclusion and application of ICT to achieve specific benefits for society.
- ⁶ The Commissioners for Digital Economy and Society (Oettinger); Internal Market, Industry, Entrepreneurship and SMEs (Bieńkowska); Competition (Vestager); Employment, Social Affairs, Skills and Labour Mobility (Thyssen); Justice, Consumers and Gender Equality (Jourová); Economic and Financial Affairs, Taxation and Customs (Moscovici); Financial Stability, Financial Services and Capital Markets Union (Hill); Education, Culture, Youth and Sport (Navracsics); Research, Science and Innovation (Moedas); Regional Policy (Crețu); Health and Food Safety (Andriukaitis); and Agriculture and Rural Development (Hogan).
- ⁷ As expressed in Mr Juncker's [Political Guidelines](#) and his mission letters to Vice-President for the Digital Single Market [Ansip](#) and Commissioner for Digital Economy and Society [Oettinger](#).
- ⁸ For example, a September 2014 [report](#) of Price Waterhouse Coopers shows an increase of 48% in cyber-security incidents since 2013.

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