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A Digital Single Market Strategy for Europe

1. INTRODUCTION: WHY WE NEED A DIGITAL SINGLE MARKET

The global economy is rapidly becoming digital. Information and Communications Technology (ICT) is no longer a specific sector but the foundation of all modern innovative economic systems. The Internet and digital technologies are transforming the lives we lead – as individuals, in business, and in our communities as they become more integrated across all sectors of our economy and society.

These changes are happening at a scale and speed that bring immense opportunities for innovation, growth and jobs. They also raise challenging policy issues for public authorities which require coordinated EU action. All Member States are wrestling with similar problems but on a national basis which is too limited to allow them to seize all the opportunities and deal with all the challenges of this transformational change. For many issues the European level offers the right framework. That is why the European Commission has set the creation of a Digital Single Market as one of its key priorities.

A Digital Single Market is one in which the free movement of goods, persons, services and capital is ensured and where individuals and businesses can seamlessly access and exercise online activities under conditions of fair competition, and a high level of consumer and personal data protection, irrespective of their nationality or place of residence. Achieving a Digital Single Market will ensure that Europe maintains its position as a world leader in the digital economy, helping European companies to grow globally.

Europe has the capabilities to lead in the global digital economy but we are not making the most of them. Fragmentation and barriers that do not exist in the physical Single Market are holding the EU back. Bringing down these barriers within Europe could contribute an additional EUR 415 billion to European GDP.¹ The digital economy can expand markets and foster better services at better prices, offer more choice and create new sources of employment. A Digital Single Market can create opportunities for new start-ups and allow existing companies to grow and profit from the scale of a market of over 500 million people. Completing the Digital Single Market could create 3.8 million jobs and can transform our public services.

This Digital Single Market Strategy has benefitted from input and dialogue with Member States, the European Parliament and stakeholders. It has a multi-annual scope and is focused on key interdependent actions that can only be taken at EU level. They have been chosen to have maximum impact, can be delivered during this Commission's mandate, and will be taken forward in line with Better Regulation principles. Each will be subject to appropriate consultation and impact assessment. The Digital Single Market Strategy will be built on three pillars:

- **Better access for consumers and businesses to online goods and services across Europe** – this requires the rapid removal of key differences between the online and offline worlds to break down barriers to cross-border online activity.

¹ The references for the factual information presented in this document are provided in the accompanying Commission Staff Working Document "A Digital Single Market Strategy for Europe – Analysis and Evidence" [add final reference]. That document also contains more detail on the nature of the challenges addressed and evidence in support of the Strategy.

- **Creating the right conditions for digital networks and services to flourish** – this requires high-speed, secure and trustworthy infrastructures and content services, supported by the right regulatory conditions for investment, fair competition and a level playing field.
- **Maximising the growth potential of our European Digital Economy** – this requires investment in ICT infrastructures and technologies such as Cloud computing and Big Data, and research and innovation to boost industrial competitiveness as well as better public services, inclusiveness and skills.

2. BETTER ONLINE ACCESS FOR CONSUMERS AND BUSINESSES ACROSS EUROPE

The Digital Single Market will provide businesses, particularly entrepreneurs, with new opportunities to scale up across Europe. Immediate action is therefore required to break down barriers to cross-border online activity including differences in contract law between Member States and reducing VAT related burden . Part of building consumer trust in cross-border online sales requires affordable and high quality cross-border parcel delivery services, which do not exist today. The Strategy is also about preventing unfair discrimination against consumers when they try to access content or buy goods and services online within the EU. Discrimination can come in the form of nationality, residence or geographical location restrictions which run counter to the basic principles of the EU.

2.1. Cross-border e-commerce rules that consumers and business can trust

One of the reasons why consumers and smaller companies do not engage more in cross-border e-commerce is because the rules that apply to these transactions can be complex, unclear and may differ between Member States. Having 28 different national consumer protection and contract laws discourages companies from cross-border trading and prevents consumers from benefitting from the most competitive offers and from the full range of online offers.

- EU consumers could save EUR 11.7 billion each year if they could choose from a full range of EU goods and services when shopping on line.
- 61% of EU consumers feel confident about purchasing via the Internet from a retailer located in their own Member State while only 38% feel confident about purchasing from another EU Member State.
- Only 7% of SMEs in the EU sell cross-border.

In a single market, companies should be able to manage their sales under a common set of rules. Some aspects of consumer and contract law have already been fully harmonised for online sales (such as the information that should be provided to consumers before they enter into a contract or the rules governing their right to withdraw from the deal if they have second thoughts). However, other aspects of the contract (such as what remedies are available if tangible goods are not in conformity with the contract of sale) are only subject to EU rules providing minimum harmonisation, with the possibility for Member States to go further. When it comes to remedies for defective digital content purchased online (such as e-books) no specific EU rules exist at all, and only few national ones.

Simplified and modern rules for online and digital cross-border purchases will encourage more businesses to sell online across borders and increase consumer confidence in cross-border e-commerce. If the same rules for e-commerce were applied in all EU Member States,

57% of companies say they would either start or increase their online sales to other EU Member States.

To deliver the right conditions to enable cross-border e-commerce to flourish, the Commission, as announced in its Work Programme for 2015, will make an amended legislative proposal² to allow sellers to rely on their national laws by further harmonising the main rights and obligations of the parties to a sales contract. This will be done notably by providing remedies for non-performance and the appropriate periods for the right to a legal guarantee. The purpose is to ensure that traders in the internal market are not deterred from cross-border trading by differences in mandatory national consumer contract laws.

However, just having a common set of rules is not enough. There is also a need for more rapid, agile and consistent enforcement of consumer rules for online and digital purchases to make them fully effective. The Commission will submit a proposal to review the Regulation on Consumer Protection Cooperation³ that will clarify and develop the powers of enforcement authorities and improve the coordination of their market monitoring activities and alert mechanisms to detect infringements faster. Furthermore, the Commission will establish in 2016 an EU-wide online dispute resolution platform.

The Commission will make an amended proposal before the end of 2015 (i) covering harmonised EU rules for online purchases of digital content, and (ii) allowing traders to rely on their national laws based on a focused set of key mandatory EU contractual rights for domestic and cross-border online sales of tangible goods.

The Commission will submit a proposal for a review of the Regulation on Consumer Protection Cooperation in order to develop more efficient cooperation mechanisms.

2.2. Affordable high-quality cross-border parcel delivery

Affordable, high-quality cross-border delivery services can build consumer trust in cross-border online sales. Stakeholders complain about a lack of transparency, the excessive costs of small shipments and the lack of inter-operability between the different operators typically involved in a cross-border shipment and the resulting lack of convenience for the final consumer.

- For companies that currently do not sell online but are trying to do so, 62% say the fact that delivery costs are too high is a problem.
- Listed tariffs for cross-border parcel delivery charged by national postal operators are estimated to be two to five times higher than domestic prices.

The high prices and inefficiency of parcel delivery should not be an obstacle to cross-border online commerce. A self-regulation exercise by industry will report to the Commission in June 2015. This exercise is concentrated on quality and interoperability aspects like "track and trace" and faster delivery of parcels but does not cover the price dimension or regulatory oversight. The Commission will assess action taken by industry and launch complementary measures to improve price transparency for European deliveries, address high prices of small shipments and enhance regulatory oversight of the cross-border parcel markets to ensure well-functioning cross-border delivery. The Commission will assess the need for additional

² COM(2011) 635, 2011/0284/COD

³ Regulation (EC) No 2006/2004

measures after a period of two years from adoption of these measures, taking due account of progress made.

The Commission will launch measures in the first half of 2016 to improve price transparency and enhance regulatory oversight of parcel delivery.

2.3. Preventing unjustified geo-blocking

Geo-blocking refers to practices used for commercial reasons by online sellers that result in the denial of access to websites based in other Member States. Sometimes consumers are able to access the website, but still cannot purchase products or services from it. The consumer may also be re-routed to a local website of the same company with different prices or a different product or service. In other cases, where the sale is not denied, geo-localising practices are used as a result of which different prices are automatically applied on the basis of geographic location, for example when online car rental customers in one Member State pay more for the identical car rental in a given destination than online customers in another Member State. Geo-blocking is one of several tools used by companies to segment markets along national borders (territorial restrictions). By limiting consumer opportunities and choice, geo-blocking is a significant cause of consumer dissatisfaction and of fragmentation of the Internal Market.

- 74% of the complaints received by the European Consumer Centres Network regarding price differences or other geographical discrimination faced by consumers relate to online cross-border purchases.

Geo-blocking practices may be the result of a unilateral decision by market players, of agreements among competitors to share the market, or of vertical agreements (for distribution rights on a territory). Sometimes these restrictions on supply and ensuing price differentiation can be justified, for instance where the seller needs to comply with specific legal obligations. However, in many cases online geo-blocking is not justified. These unjustified practices should be expressly prohibited so that EU consumers and businesses can take full advantage of the single market in terms of choice and lower prices.

The Commission will make legislative proposals in the first half of 2016 to end unjustified geo-blocking. Action could include targeted change to the e-Commerce framework⁴ and an assessment of the framework set out by Article 20 of the Services Directive⁵.

The Commission is also launching a Competition Sector Inquiry focusing on the application of competition law in the e-commerce area.

2.4. Better access to digital content - A modern copyright framework

Copyright underpins creativity and the cultural industry in Europe. The EU strongly relies on creativity to compete globally and is a world leader in certain copyright-intensive sectors. Digital content is one of the main drivers of the growth of the digital economy. 56% of Europeans use the internet for cultural purposes and spending on digital entertainment and media is predicted to see double digit growth rates (around 12%) for the next five years.

⁴ Directive 2000/31/EC

⁵ Directive 2006/123/EC

Behaviour is changing as consumers increasingly view content on mobile devices and expect to be able to access content from everywhere and wherever they are.

Barriers to cross-border access to copyright-protected content services and their portability are still common, particularly for audiovisual programmes. As regards portability, when consumers cross an internal EU border they are often prevented, on grounds of copyright, from using the content services (e.g. video services) which they have acquired in their home country.

- 45% of companies considering selling digital services online to individuals stated that copyright restrictions preventing them from selling abroad are a problem.
- Less than 4% of all video on demand content in the EU is accessible cross-border.

In addition, when trying to access or purchase online copyright-protected content from another Member State, consumers are sometimes told that it is unavailable or cannot be accessed from their own country. This situation is partly linked to the territoriality of copyright and difficulties associated with the clearing of rights. In other cases, the lack of availability and/or access may result from contractual restrictions between rights holders and distributors, or from business decisions taken by distributors. This may sometimes be due to the role territorial exclusivity plays in the financing of certain types of (audiovisual) works.

Innovation in research based on the use of text and data mining (e.g. copying of text and datasets in search of significant correlations or occurrences) is hampered by the absence of a clear EU-wide legal framework. There is a need for greater legal certainty to enable researchers and educational institutions to make wider use of copyright-protected material, including across borders, so that they can benefit from the potential of these technologies and from cross-border collaboration.

An effective and balanced civil enforcement system against commercial scale infringements of copyright is central to investment in innovation and job creation. In addition the rules applicable to activities of online intermediaries in relation to copyright protected works require clarification, given in particular the growing involvement of these intermediaries in content distribution. Measures to safeguard fair remuneration of creators also need to be considered in order to encourage the future generation of content.

Europe needs a more harmonised copyright regime which provides incentives to create and invest while allowing transmission and consumption of content across borders. To this end, the Commission will propose solutions which maximise the offers available to users and open up new opportunities for content creators, while preserving the financing of EU media and innovative content.

The Commission will make legislative proposals before the end of 2015 to reduce the differences between national copyright regimes and allow for wider online access to works by users across the EU, including through further harmonisation measures. The proposals will include: (i) full portability of legally acquired content, (ii) cross-border access to legally purchased online services while ensuring the financing of the audiovisual sector, (iii) greater legal certainty for the cross-border use of content for specific purposes (e.g. research, education, text and data mining, etc.) through harmonised exceptions, (iv) clarifying the rules on the activities of intermediaries in relation to copyright-protected content and (v) modernising enforcement of intellectual property rights, focusing on commercial-scale infringements (the 'follow the money' approach) as well as its cross-border applicability.

2.5. Reducing VAT related burdens and obstacles when selling across borders

The complications of having to deal with many different national systems represent a real obstacle for companies trying to trade cross-border both on and offline. Since 1 January 2015, with the entry into force of new "place of supply" rules, VAT on all telecommunications, broadcasting and electronic services is levied where the customer is based, rather than where the supplier is located.

In parallel, an electronic registration and payment system has been implemented to reduce the costs and administrative burdens for businesses concerned. This should be extended to tangible goods ordered online both within and outside the EU. Instead of having to declare and pay VAT to each individual Member State where their customers are based, businesses would be able to make a single declaration and payment in their own Member State.

Currently goods ordered online from third country suppliers can benefit from the small consignment import exemption allowing shipment free of VAT to EU private customers. This gives them a competitive advantage over EU suppliers and market distortions have already been signalled in various Member States. Such an exception would no longer be needed if VAT were to be collected through a single and simplified electronic registration and payment mechanism.

- An EU business wishing to make cross-border sales faces a VAT compliance cost of at least EUR 5,000 annually for each targeted Member State.
- EU businesses face significant distortions from VAT free goods supplied by non-EU business. These distortions cost EU business turnover of up to EUR 4.5 billion annually.

The Commission is working to minimise burdens attached to cross-border e-commerce arising from different VAT regimes, provide a level playing field for EU business and ensure that VAT revenues accrue to the Member State of the consumer.

In addition, as regards direct taxation, the Commission will shortly present an Action Plan on a renewed approach for corporate taxation in the Single Market, under which profits should be taxed where the value is generated, including in the digital economy.

The Commission will make legislative proposals in 2016 to reduce the administrative burden on businesses arising from different VAT regimes including (i) extending the current single electronic registration and payment mechanism to intra-EU and 3rd country online sales of tangible goods, (ii) introducing a common EU-wide simplification measure (VAT threshold) to help small start-up e-commerce businesses, (iii) allowing for home country controls including a single audit of cross-border businesses for VAT purposes and (iv) removing the VAT exemption for the importation of small consignments from suppliers in third countries.

3. CREATING THE RIGHT CONDITIONS AND A LEVEL PLAYING FIELD FOR ADVANCED DIGITAL NETWORKS AND INNOVATIVE SERVICES

The Digital Single Market must be built on reliable, trustworthy, high-speed, affordable networks and services that safeguard consumers' fundamental rights to privacy and personal data protection. This requires a strong, competitive and dynamic telecoms sector to carry out the necessary investments, to exploit innovations such as Cloud computing, Big Data tools or the Internet of Things. The market power of some online platforms potentially raises

concerns, particularly in relation to the most powerful platforms whose importance for other market participants is becoming increasingly critical.

3.1. Making the telecoms rules fit for purpose

ICT networks provide the backbone for digital products and services which have the potential to support all aspects of our lives, and drive Europe's economic recovery. Well-functioning markets deliver access to high-performance fixed and wireless broadband infrastructure, at affordable prices. Successive adaptations of the EU's telecoms rules combined with the application of EU competition rules, have been instrumental in ensuring that markets operate more competitively, bringing lower prices and better quality of service to consumers and businesses. Effective competition is a key driver for investment in telecoms networks.

Today, the sector is undergoing structural changes and still suffers from isolated national markets, a lack of regulatory consistency and predictability across the EU, particularly for radio spectrum, and under-investment, problems which will not be fully resolved in the context of the ongoing discussions on the Telecoms Single Market package. Therefore with a view to injecting greater ambition in this process, the Commission will review all of the existing legislation and make proposals for changes where necessary. A first essential step is the adoption of the Telecoms Single Market package which the Commission expects will provide clear and harmonized rules for net neutrality and substantial progress on roaming charges, in particular for data.

Radio spectrum is a vital building block for the deployment of broadband services. It is managed at national level under widely varying conditions (e.g. different licence durations, coverage requirements). The absence of consistent EU-wide objectives and criteria for spectrum assignment at national level creates barriers to entry, hinders competition and reduces predictability for investors across Europe. Member States receive valuable revenues from the sale of spectrum rights – and these revenues will remain exclusively with Member States - but the radio spectrum should be managed by them under a more harmonised framework that is consistent with the need for a Digital Single Market.

The Commission will make specific proposals regarding the coordinated release of the 700 MHz band, which is particularly well-suited for ensuring the provision of broadband services in rural areas, while accommodating the specific needs of audiovisual media distribution.

However, more fundamental change is also necessary in the way spectrum is managed and regulated given its vital importance for connectivity. For example, the slow and still incomplete release of the 800 MHz band (the original "digital dividend" spectrum band) for wireless broadband has impeded the roll-out of 4G mobile networks and the uptake of smartphones adapted for this band.

In addition, little full "infrastructure competition" has emerged in fixed-line networks, except in very densely populated areas, where cable networks were already present, or where local authorities have been active. There is a need for simpler and more proportionate regulation in those areas where infrastructure competition has emerged at regional or national scale. The deployment of very high capacity networks needs to be encouraged while ensuring competition and adequate returns relative to risks. The question of how to establish the right funding base for broadband so as to cover the most inaccessible areas and to realise public-

interest objectives (like high-capacity connectivity for schools and universities/research hubs) will be considered, including as part of the review of the Universal Service Directive.⁶

The changing market and technological environment calls for strengthening the institutional framework, which may include further enhancement of bodies in which the Member State authorities are themselves represented – such as the Body of European Regulators for Electronic Communications or the Radio Spectrum Policy Group.

Telecoms operators compete with services which are increasingly used by end-users as substitutes for traditional electronic communications services such as voice telephony, but which are not subject to the same regulatory regime. The review of the telecoms rules will look at ways of ensuring a level playing field for all players and services.

The Commission will present proposals in 2016 for an ambitious overhaul of the telecoms regulatory framework focusing on (i) a consistent single market approach to spectrum policy and management (ii) delivering the conditions for a true single market by tackling regulatory fragmentation to allow economies of scale for efficient network operators and service providers and effective protection of consumers, (iii) ensuring a level playing field for all market players and consistent application of the rules, (iv) incentivising investment in high speed broadband networks (including a review of broadband obligations in the context of the Universal Service Directive) and (v) an effective regulatory institutional framework.

3.2. A media framework for the 21st century

The audiovisual landscape is affected by rapid technological changes and by the development of new business models for content distribution. Viewers access audiovisual content via the Internet in an increasing variety of ways, and portable devices (such as smart phones) are changing viewing patterns. The Audiovisual Media Services Directive⁷ has facilitated the circulation of audiovisual programmes across the EU. The Directive already covers both traditional television broadcasts and on-demand audiovisual media services, and imposes a set of minimum rules on both types of distribution. In some respects, however, on-demand services are subject to lower obligations, since users have a higher degree of choice and control over the content and the time of viewing.

This regulatory framework has facilitated the emergence of a vibrant market and it is important to ensure that it fully keeps up with market and technological developments. The Commission will examine whether the current system of rules applying to broadcast and to on-demand services should be adapted. It will also consider whether the current scope or the rules should be broadened to encompass new services and players that are currently not considered as audiovisual media services under the Directive and/or providers that fall outside its current geographical scope.

The Commission will review the Audiovisual Media Services Directive with a focus on its scope and on the nature and intensity of rules applicable to all market players, in particular measures for the promotion of European works, protection of minors and advertising rules.

⁶ Directive 2002/22/EC

⁷ Directive 2010/13/EU

3.3. A fit for purpose regulatory environment for platforms and intermediaries

3.3.1. Role of online platforms

Online platforms (e.g. search engines, social media, e-commerce platforms, app stores, price comparison websites) are playing an ever more central role in social and economic life: they enable consumers to find online information and businesses to exploit the advantages of e-commerce. Europe has a strong potential in this area but is held back by fragmented markets which make it hard for businesses to scale-up.

Platforms generate, accumulate and control an enormous amount of data about their customers and use algorithms to turn this into usable information. The growth of such data is exponential – 90% of all data circulating on the Internet were created less than 2 years ago. Moreover, platforms have proven to be innovators in the digital economy, helping smaller businesses to move online and reach new markets. New platforms in mobility services, tourism, music, audiovisual, finance, accommodation and recruitment have rapidly and profoundly challenged traditional business models and have grown exponentially. The rise of the sharing economy also offers opportunities for increased efficiency, growth and jobs, through improved consumer choice, but also potentially raises new regulatory questions.⁸

Although their impact depends on the types of platform concerned and their market power, some platforms can control access to online markets and can exercise significant influence over how various players in the market are remunerated. This has led to a number of concerns over the growing market power of some platforms. These include a lack of transparency as to how they use the information they acquire, their strong bargaining power compared to that of their clients, which may be reflected in their terms and conditions (particularly for SMEs), promotion of their own services to the disadvantage of competitors, and non-transparent pricing policies, or restrictions on pricing and sale conditions.

Some online platforms have evolved to become players competing in many sectors of the economy and the way they use their market power raises a number of issues that warrant further analysis beyond the application of competition law in specific cases.

3.3.2. Combatting illegal content on the Internet

The principle, enshrined in the e-Commerce Directive, that Internet intermediary service providers should not be liable for the content that they transmit, store or host, as long as they act in a strictly passive manner has underpinned the development of the Internet in Europe. At the same time when illegal content is identified, whether it be information related to illegal activities such as terrorism/child pornography or information that infringes the property rights of others (e.g. copyright), intermediaries should take effective action to remove it. Today the disabling of access to and the removal of illegal content by providers of hosting services can be slow and complicated, while content that is actually legal can be taken down erroneously. 52.7% of stakeholders say that action against illegal content is often ineffective and lacks transparency. Differences in national practices can impede enforcement (with a detrimental effect on the fight against online crime) and undermine confidence in the online world. As the amount of digital content available on the Internet grows, current arrangements are likely to be increasingly tested. It is not always easy to define the limits on what intermediaries can do with the content that they transmit, store or host before losing the possibility to benefit from the exemptions from liability set out in the e-Commerce Directive.

⁸ These will be addressed in the up-coming Internal Market Strategy

Recent events have added to the public debate on whether to enhance the overall level of protection from illegal material on the Internet. In tandem with its assessment of online platforms, the Commission will analyse the need for new proposals to tackle illegal content on the Internet, such as rigorous procedures for removing illegal content while preventing the take down of legal content, and whether to require intermediaries to exercise greater responsibility and due diligence in the way they manage their networks and systems – a duty of care.

The Commission will launch before the end of 2015 a comprehensive assessment of the role of platforms, including in the sharing economy, and of online intermediaries, which will cover issues such as (i) transparency e.g. in search results (involving paid for links and/or advertisement), (ii) platforms' usage of the information they acquire, (iii) constraints on the ability of individuals and businesses to move from one platform to another and will analyse (v) how best to tackle illegal content on the Internet.

3.4. Reinforcing trust and security in digital services and in the handling of personal data

Cyber threats are a borderless problem and have a negative impact on our economy, on citizens' fundamental rights and on society at large. The growing number of offences (for instance data interception, online payment fraud, identity theft, trade secrets theft) is leading to significant economic losses. They often result in fundamental rights violations and undermine citizens' trust in online activities.

Member States and EU institutions have long acknowledged the need to protect our networks and respond effectively to cyber-threats and have adopted both national and EU-level cybersecurity strategies and regulation. The adoption of the Network and Information Security Directive⁹, currently in the legislative process, should mark an important step forward. One of the key priorities of the European Cybersecurity Strategy¹⁰ is to develop industrial and technological resources for cybersecurity. Specific gaps still exist in the fast moving area of technologies and solutions for online network security. A more joined-up approach is therefore needed to step up the supply of more secure solutions by EU industry and to stimulate their take-up by enterprises and citizens. In addition, an effective law enforcement response to online criminal activity is necessary. The Commission has set out proposals for this issue in its European Agenda on Security¹¹.

- Only 22% of Europeans have full trust in companies such as search engines, social networking sites and e-mail services.
- 72% of Internet users worry that they are being asked for too much personal data online.

As regards personal data and privacy, the EU is committed to the highest standards of protection guaranteed by Articles 7 and 8 of the Charter of Fundamental Rights. The General Data Protection Regulation¹² will increase trust in digital services, as it should protect individuals with respect to all companies that offer their services on the European market.

⁹ COM(2013) 48 final

¹⁰ JOIN(2013) 1 final

¹¹ [Add reference]

¹² COM(2012)11 final

Special rules apply to electronic communications services (e-Privacy Directive¹³) which may need to be reassessed once the general EU rules on data protection are agreed, particularly since most of the articles of the current e-Privacy Directive apply only to providers of electronic communications services, i.e. traditional telecoms companies. Information society service providers using the Internet to provide communication services are thus generally excluded from its scope.

In the first half of 2016 the Commission will propose to establish a Public-Private Partnership on cybersecurity in the area of technologies and solutions for online network security.

Once the new EU rules on data protection are adopted, which should be by the end of 2015, the Commission will review the ePrivacy Directive with a focus on ensuring a high level of protection for data subjects and a level playing field for all market players.

4. MAXIMISING THE GROWTH POTENTIAL OF THE DIGITAL ECONOMY

Within less than a decade, most economic activity will depend on digital ecosystems, integrating digital infrastructure, hardware and software, applications and data. Digitisation of all sectors will be needed if the EU is to maintain its competitiveness, keep a strong industrial base and manage the transition to a smart industrial and services economy. 75% of the value added by the Digital Economy comes from traditional industries, rather than ICT producers, but the integration of digital technology by businesses is the weakest element. Only 1.7% of EU enterprises make full use of data technologies, while 41% do not use them at all. Digitisation also offers unprecedented opportunities to other economic sectors, such as transport (e.g. intelligent transport systems) or energy (e.g. smart metering).

The EU needs a range of measures to ensure European industries are at the forefront of developing and exploiting ICT, automation, sustainable manufacturing and processing technologies to serve the markets of the future. A digital economy can also make society more inclusive. Citizens and businesses are not currently getting the full benefits from digital services (from e-government, e-health, e-energy to e-transport) that should be available seamlessly across the EU.

4.1. Building a data economy

Big data, cloud services and the Internet of Things are central to the EU's competitiveness. Data is often considered as a catalyst for economic growth, innovation and digitisation across all economic sectors, particularly for SMEs (and start-ups) and for society as a whole. Big Data and High Performance Computing are also changing the way research is performed and knowledge is shared, as part of a transition towards a more efficient and responsive 'Open Science'.

• The Big Data sector is growing by 40% per year, seven times faster than the IT market.

A fragmented market does not provide sufficient scale for cloud computing, Big Data, data-driven science and the Internet of Things to reach their full potential in Europe. To benefit fully from the potential of digital and data technologies, we will need to remove a series of technical and legislative barriers. Restrictions, such as those related to data location (i.e.

¹³ Directive 2002/58/EC

Member States requirements to keep data inside their territory) force service providers to build expensive local infrastructures (data centres) in each region or country. Fragmented implementation of copyright rules and lack of clarity over rights to use data further obstruct the development of cross-border data use and new applications of technologies (e.g. text and data mining). The lack of open and interoperable systems and services and of data portability between services represents another barrier for the cross-border flow of data and the development of new services (e.g. cross-border multi-modal travel information systems). Legal certainty as to the allocation of liability (other than personal data related) is important for the roll-out of the Internet of Things.

Businesses and consumers still do not feel confident enough to adopt cross-border cloud services for storing or processing data, because of concerns relating to security, compliance with fundamental rights and data protection more generally. The adoption of the data protection reform package will ensure that the processing of personal data is governed by uniform, up-to-date rules throughout the Union. However, contracts often exclude, or severely limit, the contractual liability of the cloud provider if the data is no longer available or is unusable, or they make it difficult to terminate the contract. This means that the data is effectively not portable. In the field of data protection, both the current and the future legislative frameworks prevent restrictions to the free movement of personal data within the Union. Restrictions to free movement of data on other grounds are not addressed. Member States are therefore not able to inhibit the free movement of personal data on grounds of privacy and personal data protection, but may do so for other reasons. Any unnecessary restrictions regarding the location of data should both be removed and prevented.

The Commission will propose in 2016 a European 'Free flow of data' initiative that tackles restrictions on the free movement of data for reasons other than the protection of personal data within the EU and unjustified restrictions on the location of data for storage or processing purposes. It will address the emerging issues of ownership, interoperability, usability and access to data in situations such as business-to-business, business to consumer, machine generated and machine-to-machine data. The Commission will launch a European Cloud initiative addressing cloud services certification, switching of cloud services providers and a research open science cloud.

4.2. Boosting competitiveness through interoperability and standardisation

In the digital economy, interoperability means ensuring effective communication between digital components like devices, networks or data repositories. It also means connecting better along the supply chain or between industry and services sectors. It means more efficient connections across borders, between communities and between public services and authorities. E-government services that are being developed in different Member States should be able to communicate with each other and not develop in isolation. Today, there is a common understanding among Member States on the basic requirements to achieve interoperability, based on the "European Interoperability Framework" put forward by the Commission in 2010. This framework should now be updated and extended.

Standardisation has an essential role to play in increasing interoperability of new technologies within the Digital Single Market. It can help steer the development of new technologies such as 5G wireless communications, digitisation of manufacturing and construction processes, data driven services, cloud services, cybersecurity, e-health, e-transport and mobile payments. The EU Rolling Plan for ICT Standardisation is an essential instrument in this regard.

However, an increased effort is needed to ensure that standardisation output keeps pace with changes in technologies. Currently, industry stakeholders decide 'bottom-up' in which areas to develop standards and this is increasingly taking place outside of Europe, undermining our long-term competitiveness. We need to define missing technological standards that are essential for supporting the digitisation of our industrial and services sectors (e.g. Internet of Things, cybersecurity, big data and cloud computing) and mandating standardisation bodies for fast delivery.

Moreover, availability of standards is often not sufficient to ensure interoperability, if existing standards are not integrated by suppliers in their solutions. Public procurement plays an important role in promoting standards and Member States have created national catalogues of ICT-standards and interoperability specifications to guide public procurers and accelerate standards adoption on national markets. Integrating these catalogues into European catalogues would avoid market fragmentation at EU level.

The Commission will launch an integrated standardisation plan to identify and define key priorities for standardisation with a focus on the technologies and domains that are deemed to be critical to the Digital Single Market, including essential sectoral standards in areas such as health (telemedicine, e-health), transport (transport planning, e-freight), environment, and energy (smart metering). The Commission will revise and extend the European Interoperability Framework.

4.3. An inclusive e-society

The Commission aims to support an inclusive Digital Single Market in which citizens and businesses have the necessary skills and can benefit from interlinked and multi-lingual e-services, from e-government, e-health, e-energy or e-transport.

4.3.1. Digital skills and expertise

Demand for digitally skilled employees is growing by around 4% a year. Shortages of ICT professionals in the EU could reach 825,000 unfilled vacancies by 2020 if no decisive action is taken. The EU has seen improvements in the basic digital skills of its citizens (increasing from 55% to 59% of the population), but still has a long way to go. Digital skill levels need also to be raised among employees in all economic sectors and among job seekers to improve their employability. Change is needed in the way education and training systems adapt to the digital revolution. These changes can draw on EU-level initiatives such as the "Grand Coalition for digital jobs", "EU Code Week" and "Opening up Education".

The responsibility for curricula lies with the Member States which need urgently to address the lack of essential digital skills. The Commission will support their efforts and will play its role in enhancing the recognition of digital skills and qualifications and increasing the level of ICT professionalism in Europe. The Commission will inform the social partners and invite them to include the Digital Single Market in their social dialogue at European level.

The Commission will address digital skills and expertise as a key component of its future initiatives on skills and training.

4.3.2. E-government

Public services in Europe have embraced new technologies to varying degrees but more can be done to modernise public administration, achieve cross-border interoperability and facilitate easy interaction with citizens.

Online public services are crucial to increasing the cost-efficiency and quality of the services provided to citizens and companies. One example of increased efficiency is the 'Once Only' principle – only in 48% of cases do public administrations reuse information about the citizen or companies that is already in their possession without asking again. The extension of this principle, in compliance with data protection legislation, would generate an annual net saving at the EU level of around EUR 5 billion per year by 2017. The Commission will launch a pilot for the 'Once-Only' principle for businesses and citizens and explore the possibility of an EU wide e-safe solution (a secure online repository for documents). Extending 'Once-Only' across borders would further contribute to the efficiency of the Digital Single Market.

Public procurement represents approximately 19% of EU GDP and EU wide e-procurement is expected to save EUR 50 billion annually. The 2014 public procurement reform package foresees a transition to full e-procurement by October 2018.¹⁴ Increased efforts are needed to meet this target given that in many Member States the transition has started at a slow pace.

Contact points between public authorities and citizens/businesses are currently fragmented and incomplete. The needs of businesses and citizens in their cross-border activities could be better met by building on the Digital Services Infrastructures of the Connecting Europe Facility and extending and integrating existing European portals, networks, services and systems (such as Your Europe, Single Points of Contact, Product Contact Points, Contact Points for Construction Products) and linking them to the "Single Digital Gateway". Further, the use of electronic documents should be promoted across the EU to increase transparency and reduce costs and administrative burden for business and individuals.

Businesses are held back by regulatory fragmentation and barriers which makes it harder for them to scale-up and operate across borders within the Internal Market. Many Member States have called for action including helping companies to be formed quickly (e.g. in 24 hours). The Commission considers that any established company should be able to expand its operations cross-border online and be pan-European within a month building on the interconnection of business registers and the 'Once-Only' principle.¹⁵

The Commission will present a new e-Government Action Plan 2016-2020 which will include (i) mandatory interconnection of business registers by 2017, (ii) launching in 2016 an initiative with the Member States to pilot the 'Once-Only' principle; (iii) extending and integrating European and national portals to work towards a 'Single Digital Gateway' to create a user friendly information system for citizens and business and (iv) accelerating Member States' transition towards full e-procurement and interoperable e-signatures.

¹⁴ Directive 2014/24/EU, Directive 2014/25/EU

¹⁵ The Commission will further elaborate the steps necessary to reach these goals in its Single Market Strategy.

5. DELIVERING THE DIGITAL SINGLE MARKET

Building a Digital Single Market is a key part of the EU's strategy to prepare itself for the future and to continue to deliver high living standards for its population. It requires political will and means delivering on the actions set out in this Strategy. It requires mobilising the necessary funds and resources and establishing a governance structure among the key actors to ensure effective delivery by the EU institutions, Member States and stakeholders. Where there is already sufficient evidence of barriers that need to be removed the Commission will table legislative proposals and take initiatives to put the scale of the single market at the service of the consumer and business. Where further consultation and evidence gathering is needed in order to identify the right course of action the Commission will engage stakeholders in discussing the options available. This agenda calls for the Commission, Parliament and Member States to work together and to take ambitious steps.

5.1. Investing in the Digital Single Market

A key aim of the Digital Single Market Strategy is to establish a supportive investment climate for digital networks, research and innovative business. Setting the right framework conditions will help generate investor confidence. Achieving our digital ambitions will require significant investment. EU public funding is already earmarked for Digital Single Market infrastructures and services as well as for research and innovative SMEs (including start-ups). The European Structural and Investment Funds are expected to programme around EUR 21.4 billion in this area. Particular efforts are needed to close the digital gap between urban and rural areas. Complementing current EU programmes, the newly created European Fund for Strategic Investment¹⁶ is designed to support a wide range of digital projects, in particular due to their high innovation and research component (and thus higher risk). Significant additional funding possibilities are provided by the European Investment Bank and the European Investment Fund.

Innovative entrepreneurs are central to the digital economy. To succeed they need increased access to finance including equity and venture capital. The EU has put in place a range of initiatives to support equity based finance, including regulatory vehicles such as the European Venture Capital Funds Regulation. However, further work is needed to make appropriate financing available as the current diversity of company statutes and related legal risks and costs across Europe tend to inhibit investment in EU start-up ventures.¹⁷

Taking into account the experience of past under-absorption of EU funds programmed for investment in broadband, the Commission will work with the European Investment Bank, project promoters and Member States to ensure that available investment funds are fully used, including technical assistance and the full use of synergies between instruments.

5.2. International dimension

The scale provided by a completed Digital Single Market will help companies to grow beyond the EU internal market and make the EU an even more attractive location for global companies. The openness of the European market should be maintained and developed further in the digital sphere. The EU should continue to press for the same openness and effective enforcement of intellectual property rights from our trading partners. To that end an ambitious

¹⁶ COM(2014) 903 final

¹⁷ The Commission will explore avenues to attract more venture capital in the context of its work on the Single Market Strategy and the Capital Markets Union.

digital trade and investment policy should be further developed including by means of the EU's free trade agreements.¹⁸ The Commission will work to develop a sustainable approach to Internet Governance through the multi-stakeholder model with the aim of keeping the Internet free and open. A completed Digital Single Market can also contribute to the success of the post-2015 development agenda.

5.3. Effective Digital Single Market governance

Reflecting the shared responsibility for delivery, the Commission will engage with the European Parliament and deepen its cooperation with Member States. We will engage in an ongoing dialogue with stakeholders to inform policy-making and to ensure effective implementation of the Strategy. Given the cross-cutting nature of the Digital Single Market Strategy, its implementation will require the support of dedicated advisory and support groups. The European Council should regularly review progress. The Commission will also seek to improve the quality of the data and analysis needed to underpin the Digital Single Market by pooling the relevant knowledge and making it easily accessible to the public. It will further develop its Digital Economy and Society Index indicator. The Commission will report regularly on progress for the Strategy.

6. CONCLUSION

The strategy for a Digital Single Market is about transforming European society and ensuring that it can face the future with confidence. The Commission invites the European Parliament and Council to endorse this Strategy to complete the Digital Single Market and to actively engage in its implementation, in close cooperation with all relevant stakeholders.

¹⁸ The Commission will present a new Trade and Investment Strategy in the autumn 2015 which will address key issues for the digital trade agenda.

Annex: Roadmap for completing the Digital Single Market

Actions ¹⁹	Timetable
Better access for consumers and businesses to digital goods and services across Europe	
Legislative proposals for simple and effective cross-border contract rules for consumers and businesses	2015
Review the Regulation on Consumer Protection Cooperation	2016
Measures in the area of parcel delivery	2016
A wide ranging review to prepare legislative proposals to tackle unjustified Geo-blocking	2015
Competition sector inquiry into e-commerce, relating to the online trade of goods and the online provision of services	2015
Legislative proposals for a reform of the copyright regime	2015
Legislative proposals to reduce the administrative burden on businesses arising from different VAT regimes	2016
Creating the right conditions for digital networks and services to flourish	
Legislative proposals to reform the current telecoms rules and the Audiovisual Media Services Directive	2016
Comprehensive analysis of the role of platforms in the market including illegal content on the Internet	2015
Review the e-Privacy Directive	2016
Establishment of a Cybersecurity contractual Public-Private Partnership	2016
Maximising the growth potential of the Digital Economy	
Initiatives on data ownership, free flow of data (e.g. between cloud providers) and on a European Cloud	2016
Adoption of a Priority ICT Standards Plan and extending the European Interoperability Framework for public services	2015
New e-Government Action Plan including an initiative on the 'Once-Only' principle and an initiative on mandatory interconnection of business registers	2016

¹⁹ To the extent that the listed measures are likely to have significant impacts they will be accompanied by a separate impact assessment in line with the Commission's smart regulation principles