
A Digital Single Market Strategy for Europe

1. INTRODUCTION: WHY WE NEED A DIGITAL SINGLE MARKET

The global economy is rapidly becoming a digital one, in which Information and Communications Technology (ICT) is no longer a specific sector, but the foundation of a modern innovative economic system. 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—commercial, health, education, transport, recreation, and beyond. Technology is transforming the nature of work and the dynamics of organisations and labour markets. The spread of the “Internet of Things”, cloud and big data are giving citizens, companies and public authorities an ever greater knowledge base to help them to make decisions. Europe has the assets to succeed in this global digital economy: at present we are not making the most of them.

The Single Market is one of European Union’s greatest achievements, not just for Europe but also for global trade, investment and the world economy. The free flow of goods, services, people and capital have bought substantial positive economic growth, and the Single Market has been continually adapted to keep pace with the increase in the services sector. We now need to create a Digital Single Market where everything that is also possible in the physical Single Market is possible in the digital world.

However, fragmentation and barriers that do not exist in the physical Single Market are holding the European Union back. Bringing down these barriers within Europe could contribute an additional 340 billion euros to European GDP. The digital economy can expand markets and foster better services at better prices, offer more choice and create new sources of employment. Completing the Digital Single Market could create 3.8 million jobs and reduce the cost of public administrations by 15-20%.
Our aims are simple: First, to create a Digital Single Market as an area where the free movement of goods, persons, services and capital is assured and where citizens and businesses can seamlessly access and exercise online activities under conditions of fair competition, irrespective of their nationality or place of residence. Second, to create a Digital Single Market that will help restore Europe as a world leader in information and communications technology, with all the tools and skills required to succeed in the global digital economy.

A Digital Single Market should build on Europe's unique strengths in Information and Communications Technology. For example, those European technology companies that have been founded in the last 15 years have a combined valuation exceeding $1bn and the 'app' economy alone is expected to generate 4.8 million jobs and €63 billion revenues by 2018. 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. It can also transform our public services.

To achieve our goals the Commission, Parliament and Member States will need to work together and to take ambitious steps.

With this Digital Single Market Strategy the Commission sets out its approach as to how the European Union should seize the opportunities and address the challenges brought by the digital revolution.

**What should the DSM mean for citizens and businesses**

A seamless area in which people and businesses can trade, innovate and interact legally, safely and securely, are connected at an affordable cost, making their lives easier at home and abroad;

Unhindered access to diverse content and portability of legally obtained content. No discrimination or barriers to accessing the entire European market for goods and services and a copyright regime for a culturally varied and vibrant market, benefitting creators, publishers and consumers alike;

Citizens and businesses have the best possible safeguards, empowerment, legal certainty and clarity regarding their personal data in the digital world and a level playing field for all market players;

A supportive environment for businesses – small and large – to fully exploit new technologies like Big Data or Cloud Computing. Small online businesses can start operating in "just a click across the EU", grow fast, scale up and sell across borders;

Citizens and businesses enjoy the benefits of public and private services that are interlinked across the EU (health, justice, transport e-signatures, procurement) and have the skills to operate and work in an e-society.

The Digital Single Market Strategy focuses on priority actions which can only be taken at EU level, that will make the maximum difference and that can be delivered during this Commission’s mandate. These actions will together with actions that form part of other Commission priorities, such as the Energy Union, the European Security Agenda and the Strategic Investment Plan, helping to achieving the Digital Single Market. The forthcoming Single Market Strategy will also improve the framework conditions for the Single Market thereby complementing the Digital Single Market Strategy.

Making the Single Market fit for a digital age requires rapid actions to remove the major differences between the online and offline worlds i.e. breaking down barriers to cross-border on-line activity. This is the first pillar of actions for the Strategy.

Secondly, since all digital services, applications and content depend on the availability throughout Europe of high-speed, secure and trustworthy infrastructures, we need action to create the right regulatory conditions for investment, stimulate competition and ensure a level playing field between market players.

Thirdly, breaking down barriers to the Digital Single Market is not enough if businesses in Europe are not in a position to be able to adopt digital technologies. The Strategy supports increased digitalisation of the EU economy, including investment in ICT infrastructures. We
need actions with far-reaching effects on European industrial competitiveness as well as on better public services, inclusiveness and skills.

The Digital Single Market Strategy will therefore be built on three pillars:

- Better access for consumers and businesses to on-line goods and services across Europe;
- Creating the right conditions for digital networks and services to flourish;
  - Maximising the growth potential of our European Digital Economy.

The sections that follow describe the problems and challenges that need to be tackled, giving a brief overview of the supporting evidence as well as an outline of the actions themselves.

2. BETTER ACCESS FOR CONSUMERS AND BUSINESSES TO ON-LINE GOODS AND SERVICES ACROSS EUROPE

The first aim of the Strategy is to tackle a number of obstacles which prevent cross-border online activities from being as seamless as national ones. The Commission has identified a number of areas where immediate action is required. First, differences in contract law between Member States are creating a barrier to trade within the Single Market. Second, there is a lack of affordable and high quality cross-border parcel delivery services within Europe. Third, consumers should not be unfairly discriminated against when accessing content or buying goods and services online due to their nationality, residence or geographical location, within the borders of the EU. Fourth, businesses should not have to face burdensome regulatory obstacles such as heavy value-added-tax procedures when selling across borders.

Key actions – Better access for Consumers & Businesses to on-line goods/services

- Propose simple and effective cross-border rules for consumers and businesses and strengthen enforcement of Consumer Protection Cooperation rules
- Prepare an initiative in the area of parcel delivery with a focus on improving price transparency and enhanced regulatory oversight
- Tackle unjustified geo-blocking through a combination of actions
- Propose reform of the copyright regime
- Propose to reduce the administrative burden arising from different VAT regimes

2.1. Easier and more trustworthy cross-border e-commerce for consumers and business

Consumers and smaller companies are reluctant to engage in cross border e-commerce because the rules that apply to these transactions can be complex and unclear to them and may well differ from one Member State to another. Having potentially 28 different national consumer protection and contract laws constitutes a major obstacle to cross-border e-commerce; it discourages companies from trading cross-border and prevents consumers from benefitting from the full range of offers that would otherwise be available to them online.

- 61% of EU consumers feel confident about purchasing via the Internet from a retailer/provider located in their own country.
- 38% feel confident about purchasing via the Internet from a vendor located in another EU country.
- 15% of consumers bought online from other EU countries in 2014, while 44% did so domestically.
- EU consumers could save €11.7bn each year if they could choose from a full range of EU goods and services when shopping on line.
- 59% of retailers say they are confident about selling online but only 31% are confident about selling online to other EU countries.
- 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. This applies for example to the information that should be provided to consumers before they enter into a contract as well as 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 goods prove to be defective) are only subject to minimum EU rules, with the possibility for Member States to go further. When it comes to remedies for defective digital content purchased online, such as eBooks, no specific EU rules exist at all. Broadly harmonised rules will increase legal certainty as well as trust and substantially reduce transaction costs for both consumers and business when trading cross-border. In addition, for online contracts, as of 2016, both consumers and traders will also have access to efficient out-of-court dispute resolution (ADR) schemes so that they can resolve possible disputes online in an inexpensive and easy manner (ODR).

The Commission aims to encourage more businesses to sell on-line across borders and to increase consumer confidence in cross-border e-commerce by proposing simplified and modern rules for online and digital cross-border purchases. 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 countries. There is also a need for more rapid, agile and efficient enforcement to make consumer rules for on-line and digital purchases fully effective. This requires much more consistent and active cooperation and enforcement of consumers' rights. Member States must dedicate more resources and step up the enforcement of consumer rights.

The Commission will propose legislative initiatives on simple and effective cross-border rules for consumers and businesses. This will include: harmonised EU rules for online purchases of digital content (e.g. for defective content purchased online, like e-books); the application of the trader's national law with a limited but harmonised set of key mandatory EU contractual rights applicable to domestic and cross-border online sales of tangible goods (such as the main rights and obligations of the parties to the sales contract; remedies for non-performance or minimum period for the right to a legal guarantee). The Commission will also review the Regulation on Consumer Protection Cooperation and develop more efficient cooperation mechanisms. It will also clarify and develop enforcement authorities' investigation and enforcement powers; and improve market surveillance and alert mechanisms to detect infringements faster, especially in the digital environment.

2.2. Affordable High-Quality Cross-border Parcel Delivery

The growth of e-commerce is hampered by a lack of affordable, high-quality cross-border delivery services. 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.

* 51% of companies that sell, used to sell, or tried to sell online to other EU countries say that delivery costs to other EU countries are too high, with 27% saying this is a major problem.

* For companies that currently do not sell online but are currently trying to do so, 62% say the fact that delivery costs are too high is a problem — and for 41% this is a major problem.

The Commission aims to ensure that the cost and efficiency of parcel delivery is not an obstacle to the cross-border on-line e-Commerce. A self-regulation exercise by industry will report to the Commission in June 2015. This exercise is concentrated on quality and investment aspects like "track and trace" and speedy delivery of parcels but does not cover the price dimension. Complementary measures will focus on improving price transparency for European deliveries, as well as enhanced regulatory oversight of the cross-border parcel markets to ensure effective competition.

The Commission will prepare an initiative in the area of parcel delivery with a focus on improving price transparency and enhanced regulatory oversight. After a period of up to two years from adoption of this initiative, and taking due account of any progress made, the Commission will reassess the need for additional measures.
2.3. Preventing unjustified Geo-blocking

Geo-blocking refers to practices used for commercial reasons by online service providers that result in the denial of access to websites based in other Member States or, where the consumer is able to access the website, they are still not able to purchase products or services from it. Sometimes the consumer will be re-routed to a local website with different prices. In other such cases, where the sale is not denied, geo-localising practices – where differing pricing structures are automatically applied based on geographic location – are often used to apply differentiated prices to consumers. An example of this would be when on-line car rental customers in one Member State pay more for the identical car rental in a given destination than on-line customers in another Member State. By limiting consumer opportunities and choice, geo-blocking constitutes a significant cause of consumer frustration and of fragmentation of the Internal Market.

* In 48% of all attempts at cross-border orders does the seller actually serve the country of the consumer.
* Of the 63% of internet users in the EU who shop online, only 3/10 do so across borders.

Such unfair practices may involve sales of tangible goods, digital content online and provision of online services. They may result, among other reasons, from a unilateral decision by market players, or may be the result of agreements between undertakings to share the market, or of vertical agreements (for distribution rights on a territory). Geographically-based restrictions of supply and differentiations can sometimes be justified, for instance where the seller needs to comply with specific legal obligations or where costs associated with cross-border e-commerce (e.g. in terms of shipment) would be too high for certain types of companies. However, the Commission aims to put an end to unjustified online geo-blocking to ensure that EU consumers and SMEs can take full advantage of the benefits of a single market in terms of diversity and lower prices. Unjustified online geo-blocking as a commercial practice is incompatible with the Single Market.

The Commission will initiate action to put an end to unjustified geo-blocking. It will prepare proposals to tackle unilateral commercial decisions resulting in discrimination against the consumer based on residence. Actions include targeted change to the e-Commerce framework and clarification of the application of Article 20 of the Services Directive, or a review of Unfair Commercial Practices Directive. In parallel, the Commission will launch a Competition Sector Inquiry focusing on the application of competition law in this area.

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

Copyright underpins creativity in Europe and digital content is one of the main drivers of the growth of the digital economy. Consumption of cultural content and access to cultural diversity are important to the European population; some 56% of Europeans use the internet for cultural purposes. Images, films or music and games are the most popular online activities and digital spending on entertainment and media is predicted to have double digit growth rates (around 12%) for the next five years. Behaviour is changing as consumers switch to mobile devices. Smartphone users in Europe consume more than four hours of video content on a weekly basis, almost half of which they view on-the-go. Limitations on access pose a clear problem for the creation of a seamless Internal Market and cultural diversity. Finding balanced solutions which respond to consumer demand could generate new revenue for rights holders and ensure consumers pay for content.

* 45% of companies who are trying or considering selling digital services online to individuals (and 39% of those who are trying or considering selling these services online to companies and other organizations) consider that copyright, preventing them from selling abroad, is 'a problem'.

* 1/5 of the European population indicated their interest in watching or listening to content from other EU countries and 1/5 in watching or listening to content from home when abroad.
Of all the video on demand content in the EU, less than 4% of that content is available cross-border.

The Commission aims to ensure that Europe has a copyright regime fit for the digital age benefiting both the creators, innovators and consumers alike, by promoting a better functioning European market for content. Restrictions to access to online media content are still frequent, particularly for audio-visual programmes. As soon as they cross an EU border, consumers are prevented from using the content services (e.g. for video services) for which they have paid in their home country.

In addition, when trying to access or purchase copyright-protected content from another Member State, they are sometimes confronted with the message that it is unavailable or cannot be accessed from their own country. These contractual practices reflect the central role of territorial exclusivity in the production and financing of audio-visual works (where large upfront investments are funded through the pre-sale of exclusive rights in certain territories) but some of these restrictions originate from contractual arrangements between rights-holders and distributors (online service providers, broadcasters, etc.).

In certain sectors that are key to the development of knowledge and education, there is also a need to provide legal certainty and enable researchers and education institutions to make wider use of copyright-protected material, including across borders, in order to encourage innovation in these areas, to allow them to benefit from the potential of technologies and to collaborate across borders. In particular, research relies increasingly on text and data mining techniques (e.g. scanning of text and datasets in search of significant correlations or occurrences). However, innovation in research both for non-commercial and commercial purposes based on the use of text and data mining is hampered by the absence of a clear EU-wide legal framework.

From the creators' perspective, there is a concern that inappropriate changes to the copyright framework may affect the overall value of the rights sold to distributors/platforms/broadcasters, which could also have a negative impact on the financing of EU media content, which is currently territorially based. There is a need therefore for a balanced copyright reform including measures that would benefit rights holders, such as matching reforms to end the fragmented regulatory framework within the Digital Single Market. Likewise, the need for a more effective and balanced cross-border civil enforcement system against commercial scale infringements of intellectual property rights will be addressed. Commercial scale IP-infringement discourages investment in innovation and undermines job creation. This is also an issue to be taken into account in the Commission's ongoing analysis of the role of online platforms in the digital economy and the rules relating to liability for illegal content on the Internet, as further discussed below.

The Commission will propose measures aimed at: (i) allowing full portability of legally acquired content (e.g. access to subscription services already acquired in the home country while staying in another Member State), (ii) facilitating access to legally paid for cross-border services (e.g. allowing a resident of one Member State to access online content currently available only to residents of another Member State) while safeguarding the value of rights in the audio-visual sector, (iii) enhancing legal certainty and enabling more cross-border use of content for specific purposes (e.g. research, education, text and data mining. In addition, the Commission will launch in parallel a process to review and modernise the cross-border civil enforcement of intellectual property rights such that commercial scale infringing activity can be more effectively addressed in the EU.

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

In terms of direct taxation the Commission has already delivered significant progress in the fight against tax avoidance and tax fraud through the implementation of its 2012 Action Plan to Strengthen the Fight against Tax Fraud and Tax Evasion. However the political debate has moved on and the earlier focus on improving tax compliance and administrative cooperation has now expanded to encompass those features of tax systems which contribute to aggressive tax planning. This is why the Commission will shortly present an Action Plan on a renewed
approach for corporate taxation in the Single Market, under which profits are taxed where the value is generated, including in the digital economy.

In terms of indirect taxes (VAT), the complications of having to deal with many different national systems represent a real obstacle for companies trying to trade cross-border. 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.

- For 15% of the companies selling cross-border, the complications or costs of dealing with foreign taxation is a major problem, as is not knowing the rules that need to be followed.
- Total VAT costs have been estimated at EUR 80 billion of which EUR 69 billion relate to its complexity and variation across the European Union.
- Evidence on VAT 3rd countries (Taxud new (unfinished?) study eg 100 million parcels/year...)

In parallel, in order to make it easier to comply with the new rules, a Mini One Stop Shop has been implemented to reduce the costs and administrative burdens for businesses concerned. Instead of having to declare and pay VAT to each individual Member State where their customers are based, businesses are able to make a single declaration and payment in their own Member State. While this is a significant milestone for the VAT system, many business organisations and Member States consider that more can be done to address the remaining disincentives for businesses to engage in cross-border e-commerce produced by the VAT system. The Commission aims to minimise burdens attached to selling cross-border arising from different VAT regimes to encourage cross-border online trade, particularly for SMEs and start-ups.

The Commission will bring forward proposals to reduce the administrative burden on businesses arising from different VAT regimes and encourage cross-border online trade, particularly for SMEs. These proposals could include (i) extending the simplified system with a single interaction point for businesses, already in place for digital products, also to cross-border online sales of tangible goods, (ii) introducing a common EU-wide distance sales turnover threshold for VAT applicable to e-commerce suppliers of goods and services, (iii) allowing for a single audit of cross-border businesses for VAT purposes and (iv) removing the VAT exemption for the importation of small consignments of goods purchased by consumers from suppliers in third countries.

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

The second general aim of the Strategy is to ensure that European citizens, businesses and public administrations can access reliable, trustworthy, high-speed, affordable networks and services. Key to this is a strong and dynamic telecoms sector which is essential if Europe is to exploit innovations such as cloud computing, new tools that use Big Data, connected cars, the Internet of Things, smart cities, modernised public administrations, from e-Health to e-Education. Our rules must ensure that citizens and businesses have trust in secure networks and that their fundamental rights to privacy are safeguarded.

Our rules must also reflect the changing market dynamics, be simpler for all and future-proof but also ensure a level playing field between traditional telecoms companies and new Internet players where they compete in the same markets. The same is true of 'content' markets where Smart Phones and laptop are changing viewing patterns and where consumers no longer rely
only on traditional TV broadcasting and can increasingly access on-demand content. Our rules need to keep pace with these developments, including for the rising importance of the ‘sharing economy’. Moreover, the growing market power of some on-line platforms, which have proven to be key innovators in the digital economy, is potentially raising concerns, particularly in relation to the most powerful platforms whose importance for other market players is becoming increasingly critical.

**Key actions - Creating the conditions for digital networks and services to flourish**

- Propose an ambitious reform of the current telecoms rules and review the ePrivacy Directive
- Propose a regulatory environment for audio-visual media and services fit for the digital age
- Carry out a comprehensive investigation and consultation of the role of platforms in the market and on issues relating to liability for content on the Internet

**3.1. Making the telecom rules fit for purpose**

Today, the telecommunication sector is the backbone of digital products and services which have the potential to support all aspects of our lives, and drive Europe’s economic recovery. Our EU rules have laid the foundation for Europe and its industrial players to lead the world. However, as markets become more competitive, European and global, our regulatory frameworks need to evolve. Successive adaptations of the EU’s telecoms rules as well as the application of the EU competition rules have been instrumental in ensuring that markets operate competitively, bringing lower prices and better quality of service to consumers and businesses throughout the EU. But the sector suffers from fragmentation along national borders; a lack of regulatory consistency and predictability across the Union, particularly for radio spectrum; unfairly high prices for specific services; and a lack of investment.

The Commission aims to create a genuine single market for electronic communications. A competitive market triggers investment. Our overall goal is to keep our markets competitive while offering legal certainty to market players with a set of clear rules. An effective market structure would combine companies present in many or all Member States with smaller, more agile operators.

- Europe has witnessed significant time lags in the roll-out of the latest 4G technology due to the non-availability of suitable spectrum.
- For 32% of companies, slow Internet speeds are a problem when selling abroad. For 17% of companies, the fact that their client’s Internet connection is not fast enough is a problem.

Relatively 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.

These developments have been accompanied by significant differences in the regulatory practice of National Regulatory Authorities. A fundamental issue for the completion of the Digital Single Market is the need for greater regulatory simplification and for proportionate regulation in those areas where infrastructure competition has emerged at regional or national scale. Telecoms operators compete with "Over-the-top" services and platforms such as "VoIP" (voice calls conveyed over the Internet) and messaging which are increasingly used by end-users as substitutes for traditional electronic communications services such as voice telephony and SMS, without being subject to the same regulatory regime. It is necessary to design a fair and future-proof regulatory environment for all services and to decide what level of regulation is needed.

Radio spectrum is a vital building block for the deployment of broadband services. Rights to use this spectrum are managed at national level and often under widely varying conditions (e.g. different licence durations, coverage requirements). The absence of consistent EU-wide criteria for spectrum assignment at national level creates barriers to entry for players to national markets and hinders competition and investment predictability across Europe.
For example consistency regarding the territorial/population coverage conditions imposed by Member States when granting spectrum rights is especially important in view of the overall objective of ensuring broadband availability for all. Also consistency is needed for those licensing conditions which most influence the market players' ability to develop pan-European investment strategies (e.g. more coordinated timing of awards, licence durations). Member States receive valuable revenues from the sale of spectrum rights – 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 aim to achieve such consistency through the Radio Spectrum Policy Programme e.g. for the 700 MHz band which is part of the 'digital dividend' from the release of spectrum previously allocated to broadcasting, and which is particularly well-suited for ensuring the provision of broadband services in rural areas. However, more fundamental long term change in the way spectrum is managed is required.

The current EU regulatory and spectrum management institutional set-up has not ensured sufficient consistency across the EU. Clearer, commonly applied rules would help to enhance legal certainty and support the realisation of all available economies of scale. Efforts to enhance coordination through bodies in which the Member State authorities are themselves represented – such as the Body of European Regulators for Electronic Communications or an enhanced Radio Spectrum Policy Group – are needed.

The current Telecom Single Market package discussions are now mainly focused on net neutrality and on roaming, and do not address at all the issues of spectrum, regulatory fragmentation and the majority of the consumer rules that were included in the initial Commission proposal. A first essential step is the adoption of the TSM package which the Commission expects will provide clear and harmonized rules for net neutrality and substantial progress on roaming charges, in particular for data. The Commission will take the final outcome of the TSM negotiations into account in its deliberations on the more ambitious reform of the Telecosms rules.

The Commission will prepare proposals for an ambitious overhaul of the telecoms regulatory framework. The reform should focus on: (i) a consistent single market approach to spectrum policy and management (ii) conditions for a true single market by tackling fragmented approaches to regulation and where all possible economies of scale can be realised by efficient network operators and service providers, (iii) a level playing for all players in the market and consistent application of the rules, (iv) investment incentives in high speed broadband networks, and (v) universal broadband availability including rural areas and (vi) a regulatory institutional framework that will support a single European telecoms market.

In addition consideration will need to be given to an enhanced role and wider, more equitable funding base for broadband universal service, covering the most inaccessible areas or to realise public-interest objectives (like high-capacity connectivity for schools and university/research hubs or for public protection) as part of the review of the Universal Service Directive.

3.2. Ensuring the availability of high quality media content

The EU cultural and creative sector is one of Europe's most dynamic economic sectors. It generates substantial growth and jobs and contributes more than 4% of GDP. The audio-visual media landscape is changing at a rapid pace. Viewers can increasingly access on-demand content. Various portable devices such as Smart Phones are changing viewing patterns. New business models are emerging.

Evidence box missing

In this context, some stakeholders advocate that the scope of the Audiovisual Media Services Directive should be broadened to encompass services that are either outside the definition provided by the Directive (e.g. platforms with content over which no editorial control is
exercised). In some cases, there may be insufficient EU-wide harmonisation in certain fields. It might also be necessary to re-assess the cooperation among Member States including independence requirements and the role of European Regulators Group for Audiovisual Media Services to resolve any problems in the context of the Directive’s cooperation mechanisms. Another issue that has come to the fore is 'Discoverability / Findability', which refers to the idea that content of public interest should be easy to find on any platform or device.

The Commission will review the Audiovisual Media Services Directive and focus on issues such as a level playing field for all players including on-demand platforms, levies, advertisement and protection of minors.

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

3.3.1. Role of On-line 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. Moreover, platforms have proven to be innovators in the digital economy. New platforms in mobility services, tourism, music, finance, accommodation and recruitment have rapidly and profoundly challenged the status quo and have grown exponentially. In particular, the rise of the sharing economy is not just an economic phenomenon but also a societal one, based on the personal technology at their disposal, combined with an emerging sense of community based on the need to reduce waste of resources, from money to physical assets, to space and personal time (some sharing economy platforms are currently valued at well over 25 billion euro). Nevertheless, it is also a challenge for established businesses in terms of the arrival of disruptive competitors but also for its integration into common economic and social rules, including taxation, labour law, standards, etc.

* [50% of all online activities in the EU are concentrated in 1% of internet sites]

* 12% of the search results are personalized (either new results are shown or are re-arranged), mainly due to geo-location, prior search history or whether the user is logged in or out of the search engine.

* In less than five years, peer-to-peer finance, online staffing, peer-to-peer accommodation, car sharing and music and video streaming have reached a global revenue level of around 14 billion euro, and could potentially reach 300 billion euro by 2025, representing 50% of the total revenue of the five sectors.

The Commission aims to understand better the role and systemic nature of platforms as key innovators in the digital economy and the concerns or opportunities this may entail. The rise of some platforms raises issues linked to relations between businesses, notably vis-à-vis SMEs, as opposed to business-to-consumer): potentially unfair terms of conditions limiting access to platforms, unfair practices applied by vertically integrated platforms, high fees and non-transparent pricing policies or restrictions on pricing and sale conditions. While a framework exists for business-to-consumer complaints in all EU Member States, no such mechanism exists for business-to-business relations.

Some online platforms have evolved in parallel to become players competing in many sectors of the economy. In the telecommunications sectors, some, such as Voice over the Internet platforms, have emerged not subject to the same rules, which could lead to level playing field problems.

The market power of some online platforms in the digital economy raises a number of issues that warrant further analysis. The Commission will carry out a comprehensive investigation
and consultation on the role of platforms, including the growth of the Sharing Economy. The Commission’s analysis will cover i.a. issues like those arising from a lack of transparency in search results (involving paid for links and/or advertisement) and the way Platforms use the information they acquire, possible issues relating to fair remuneration of rights-holders and limits on the ability of individuals and businesses to move from one platform to another. (Update after Google decision)

3.3.2. Combatting illegal content on the Internet

For 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 hold and transmit passively, i.e. provided they do not alter it or take ownership of it, has underpinned the development of the Internet in Europe. At the same time there is also a need to ensure that when illegal content is identified, intermediaries take effective action to remove it, whether it be information that is against the public interest (e.g. terrorism/child pornography) or information that infringes the property rights of others (e.g. copyright). This obligation to assist is enshrined in the e-Commerce directive. Today the removal of illegal content can be slow and complicated while content that is actually legal can be taken down erroneously. There is also a lack of transparency in the process. 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 also not always easy to define the limits on what intermediaries can do with the content they host without losing the immunity conferred on them by the e-Commerce Directive.

- 52.7% of all consulted stakeholders agreed that action against illegal content is often ineffective;
- 64.7% agreed that hosting service providers often take action against legal content;
- 57.9% agreed that there is too much legal fragmentation and uncertainty for hosting service providers and notice providers.

Recent events have added to the public debate on whether to enhance the overall level of protection from harmful material by requiring more rigorous, harmonised procedures for removing illegal content or whether to require intermediaries to exercise greater responsibility and due diligence in the way they manage their networks and systems.

The Commission aims to identify the right balance to strike between responsibility for combatting the propagation of illegal content and the need to preserve freedom of expression.

The Commission will further prepare proposals to tackle illegal content on the Internet and a common approach to the issue of duty of care. Alternatives include legislative proposals to harmonise the procedures for removing illegal content across the EU or establishing additional responsibilities on online companies to monitor and verify the resilience of their systems against illegal content.

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

Strong cyber security is also required to guarantee online privacy and data protection. Consumers are worried about the risks of data breaches and identity theft that are caused by cyber incidents. 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 cyber-security strategies and regulation. The adoption of the Network and Information Security Directive, currently in the legislative process will mark an important step forward.

- 22% of Europeans have full trust in companies such as search engines, social networking sites and e-mail services.
- 72% of Internet users in Europe still worry that they are being asked for too much
Furthermore the European Cyber security Strategy contains an integrated approach with five strategic priorities. One of these priorities is to develop industrial and technological resources for cybersecurity. In particular, 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.

Moreover, there is a need to examine closely the implications of the use of personal data by online players for different purposes, for example for profiling consumers, providing them with tailoring offers and advertising, offering personalised prices, personalised search results, etc. This is closely linked with the discussion on platforms and will be part of the broader analysis of this issue.

To strengthen further the protection of personal data, the EU has committed to equip its citizens and authorities with the highest standards and with enforceable rights. A major step will be achieved once the new general EU rules on data protection and privacy are agreed and come into force. However there are special rules applying to telecoms services (e-Privacy Directive) which may need to be reassessed once the general EU rules are agreed.

One key issue is that the scope of the e-Privacy Directive is generally limited to traditional telecoms companies and not to newer Internet-based service providers (sometimes referred to as ‘Over-the-top players’) who may offer similar services. Consequently there is the lack of a level playing field. The Commission aims to ensure that citizens and businesses have the best possible safeguards, empowerment, legal certainty and clarity regarding their personal data in the digital world and that there is a level playing for all market players.

Cybercrime is a borderless problem and a threat to citizens’ fundamental rights and to our economy. Offences (for instance data interception, child pornography, online payment fraud, identity theft, trade secrets theft) involve unlawful processing of personal data and gross privacy violations therefore increased security and effective law enforcement are necessary means to safeguard privacy. The Commission is tackling these issues under the auspices of the European Security Agenda however close policy coordination on the key actions will be ensured given its importance to the Digital Single Market. The Commission will also propose to establish a Cyber Security contractual Public-Private Partnership in the area of technologies and solutions for online network security which is of strategic importance for Europe.

*The Commission will review the ePrivacy Directive once the new general EU rules on data protection are agreed.*

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 particularly data. Europe is full of innovative, often internet enabled business ideas and start-ups. These are drivers of innovation for the whole economy. Young companies (5 years old or less) generate almost 50% of all new jobs.

European industries need to be at the forefront of developing and fully using the potential of ICT, automation, and sustainable and clean manufacturing and processing technologies to serve the markets of the future. The traditional manufacturing sector in the EU accounts for 2 million enterprises and 33 million jobs; it represents a quarter of all EU added-value and 60% of productivity growth. The digitisation of all industrial sectors will be key for keeping this strong European industrial base and will enable Europe to manage the transition to a smart industrial system (sometimes referred to as "Industry 4.0"). Only 1.7% of EU enterprises make full use of digital technology, while 41% do not use any of them.
The Commission's objective is to maximise the benefits from digital technologies in every economic sector in Europe, from the primary sector to manufacturing, services, and knowledge-based sectors. In this respect, the measures outlined in pillars I and II of this strategy are paramount. But beyond that, Europe needs measures to ensure we capitalise on the exponential growth and availability of data which is as important to business - and society - as is the Internet. Access to data is an essential element for innovative businesses and startups to develop new services, but European companies are not ready for big data. Interoperability and fast availability of standards in key sectors, access to cloud services and to seamless public e-services are triggers for digitally empowered business development, for startups, traditional SMEs or large established industries alike.

Easy access to capital is a critical enabler for sustainable and inclusive growth. In this context, to prepare for the development of a Capital Markets Union, the Commission has launched a consultation that will be looking at how to increase access to finance, increase investment and make our markets work better. And the Commission has launched a consultation on how to create deeper and more integrated capital markets across the EU. Technology is playing an increasing role as an enabler for bringing investors to projects and growing companies and the consultation also invites views on how the EU can best support the development by the market of new technologies and business models, to the benefit of integrated and efficient capital markets.

Building a digital economy means also an inclusive e-society. Our citizens and businesses are not benefiting as much as they could from e-services, from e-government to e-health, that are interconnected and should be available as seamless digital services across the EU. Many citizens do not have the skills to operate in an e-society and companies do not have access to a sufficient number of skilled professionals.

**Key actions - Developing A European Digital Economy With Growth Potential**

- Building a single market for data and cloud by launching a number of initiatives, including on data usability, free flow of data/interoperability, e.g. between cloud providers, and
- Launch a European Cloud (incl. for research)
- Adopt an Integrated Strategic Standards Initiative

Adopt a new e-Government Action Plan 2016-2020 to update, extend and make mandatory the European Interoperability Framework and put the 'Once-only' principle into practice for frequently used business documents when companies are going cross-border. Make mandatory interconnection of business registers a reality by early 2017.

4.1. Building a Data Economy

Data is often considered as the "oil of the modern economy", a catalyst for economic growth and innovation across all sectors of the European economy and for the society as a whole. Indeed, technology enabled data use is one of the key elements startups base their innovative services and business ideas on. Its role for traditional industries, large and small, and also future research cannot be underestimated. The Commission sees a need for action in the areas of ownership and access to data, in big data and analytics, in cloud services, in open data and science. The generation, collection and aggregation of large sets of information creates new value and potential for consumers, firms and public authorities. It is an essential component of the digitisation of the European economy and will support and add value to the transition to a smart industrial system ("Industry 4.0").

* The big data sector is growing by 40% per year, growing seven times quicker than the overall IT market.

* Big data use by the top 100 EU manufacturers could lead to savings worth 425 billion EUR.
* By 2020 big data analytics could boost EU economic growth by an additional 1.9%, equalling a GDP increase of 206 billion EUR.

* 6.2% of SMEs have adopted big data technologies, against just over 30% take-up among larger companies.

* 29% of larger European companies considered themselves ready for big data, while over 50% stated they were not.

* More than four companies in ten also think that data protection when selling abroad is a problem, with 18% saying this is a major problem.

* 59% of companies surveyed across Europe said that with the cloud they had seen savings of between 5% and 19% of total IT costs, and 26% said they had savings of 30% or more.

* Four out of ten enterprises (39%) using the cloud reported the risk of a security breach as the main limiting factor in the use of cloud computing services.

The opportunities that data technologies present can only be realised if we remove the technical and legislative barriers that currently hinder the free flow of data within the EU. The Commission's aim is to ensure an increased uptake and adoption of digital practices in European businesses and industry, helping to build a European single market for data and cloud.

The EU's ability to realise the potential of Big Data will depend on its capacity to put in place a regulatory framework which maximises the quantity of relevant data available to potential users through appropriate reward and dissemination mechanisms, but also ensures a balanced access to Big Data respecting all relevant public policy objectives and trust by the public. Data service providers encounter difficulties when they operate across borders because of restrictions, such as those related to data location and encryption, and are forced to build expensive local infrastructures (data centres) in each region or country. One of the biggest problems of firms when faced with Big Data operations is data security.

The growth of 'Cloud Computing' services (i.e. external storage of data) raises many complex questions. For example, 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. Furthermore, the 'right to use' and access or transfer a person's personal data needs to be balanced against the need to fulfill legitimate major public interests and obligations (these tend to be sector-specific, such as traffic safety, public health, protection of the environment, public safety, etc.) while enabling innovation as much as possible. In such cases, the public interest and the necessary data usage need to be clarified. Access to one's personal data and data usage needs to be facilitated by appropriate guidance, standards and technology. The lack of open and interoperable standards represents a barrier in particular for the cross-sector, cross-language and cross-border flow of data and data portability.

Big Data is also changing the way research is performed, researchers collaborate, knowledge is shared and science is organised, as part of a transition towards a more reliable, efficient and responsive 'Open Science'. The benefits of Open Science should also be exploited for the transformation of European industry, including in developing new innovative processes and products.]

increase security, certification and to also meet a needs of the scientific community

The Commission will also launch work towards a 'Free flow of data' initiative that prevents restrictions imposed by Member States on the free movement of data within the Union and unjustified data location restrictions for data storage or processing by using digital technologies such as cloud computing.

It will explore with stakeholders the need to address the emerging issues of ownership and access to data concerning non-personal data in situations as business-to-business, machine generated and machine-to-machine data. Measures could be proposed with the aim to create the necessary legal certainty and provide for sufficient incentives for data based business
Specific measures in sectors such as access to transport data will also stimulate better data services and new business models.

4.2. Boosting competitiveness through interoperability and standardisation

In the digital economy, interoperability means ensuring interconnection between digital components like devices, networks or data repositories. It also means connecting better along the supply chain or between different industry sectors e.g. manufacturing and services. It means better connections across borders, between communities and between public services e.g. hospitals. It increases the productivity and competitiveness of European industry by allowing companies to reap benefits of scale, in the Digital Single Market and beyond. It allows each sector or region to connect to others at low cost while fully maintaining a systems environment according to its own needs. Standardisation in Europe still suffers from weaknesses, in particular its slow pace. 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.

[1]

Evidence still needed here

The European standardisation system needs to take a strategic approach and deliver standards that can be accepted internationally. It should also define missing essential technological standards that are essential for supporting the industrial internet and the 'Industry 4.0' development in Europe, e.g. Internet of Things, cybersecurity, big data and cloud computing, and mandating standardisation bodies for fast delivery. The aim of the Commission is to adapt the production of standards to the speed and technological demands of the business world as well as higher levels of interoperability which are essential to ensuring the continued competitiveness of key EU industrial and services sectors.

There are also sectorial standards that are of particular benefit to the economy as a whole as they allow faster roll-out of essential services and consequently the seamless flow of data across industrial sectors and communities: in the area of transport (for connected cars and cross-border co-modal transport/mobility services), health (to facilitate cross-border availability and wide deployment of eHealth and healthy ageing services), m-payments and SG.

Moreover, national catalogues on ICT-standards and differing technical specifications, used for public procurement fragment the EU market thereby reducing interoperability. Creating a European Catalogue would be a solution to guide public procurers and contribute to interoperability, in particular through market acceptance. Mandated interoperability framework for the public sector would also be an important trigger function for the economy (see chapter 4.3 below).

As a part of an integrated and strategic standards initiative, the Commission will identify key priorities for ICT standardisation to leverage maximum impact as well as a limited number of standards that are essential to Europe. As part of this the Commission will also address several essential sectorial standardisation needs such as in the areas of health (telemedicine, e-health), transport (interoperable transport plan, e-freight), mobile-payments and facilitating cross-border provision of services. The commission will further, through the forthcoming Single Market Strategy, develop a Pan-European Information System supporting access to standardisation documents and wide participation.

4.3. An inclusive e-society

Citizens and businesses do not benefit as much as they could from e-government, e-health, e-democracy, e-modernisation, e-solutions and e-services that are interlinked across the EU. Citizens and companies do not have the skills to operate in an e-society and do not have
access to a sufficient number of skilled professionals. The aim of the Commission is to support an inclusive e-society where citizens and businesses benefit from interlinked and multi-lingual e-services, from e-government to e-health, having professional and digital skills to operate in an e-society. Benefits include: availability, speed, transparency, and quality; cost will decrease; innovative new services are more likely to emerge.

Digital skills are in high demand all across the economy with hundreds of thousands of unfilled vacancies requiring digital skills across all economic sectors; but they are short in supply. Demand for digitally skilled employees is growing by around 4% a year. Rough predictions indicate that shortages of ICT professionals in the EU would amount to up to 825,000 unfilled vacancies for ICT professionals by 2020 if no decisive action is taken. There is also an issue about the low level of general digital skills in the population, especially for women. 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 in equipping its citizens with the necessary skills and competences to fully take advantage of the digital economy. 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" ADD: specific inclusion and women in ICT initiatives.

The responsibility for curricula lies entirely with Member States who need to urgently address the lack of essential ICT skills. In its upcoming EU initiative of Skills for Employability and Competitiveness 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 first-hand knowledge and experience of the social partners would be helpful in this regard. The Commission will inform the social partners and invite them to include the digital single market in their social dialogue at European level.

Public services in Europe have already embraced new technologies to varying degrees but more can be done to modernise public administration and facilitate interaction with citizens, including developing multi-lingual services where the Digital Single Market can be a strong enabler.

- In 48% of cases, public administrations re-use information about the citizen that is already in their possession without asking again.
- A digital by default strategy through which all public services would be provided digitally only could result in around 10 billion EUR of annual savings at the EU28 level.
- The average import penetration in the public sector accounts for merely 7.5%.

The principle according to which information is collected from citizens and business only once merits priority attention as a means to reduce significantly administrative burdens for citizens and businesses. Some Member States are implementing it. If the 'once only principle' were applied across the EU it could bring savings of 5 billion euros per year. The cross-border dimension poses further challenges that need to be addressed from the outset. Building on existing concepts, the Commission will take steps to expand national information and assistance services as well as on-line procedures and make them accessible via a common platform as a Single Digital Gateway to the EU Single Market.

It is also essential that e-Government services that are being developed in the different Member States are able to communicate with each other and are not developed 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. There is a case for extending now this framework. In addition, being able to rely on secure e-authentication is an essential element in the trust chain, in particular cross-border. An accelerated uptake of interoperable e-signatures is likely to bring important economic benefits.

Public procurement represents approximately 19% of EU GDP. The 2014 Public procurement
5.1. Investing in the Digital Single Market

The variety of funding instruments of the EU are participating in the necessary investments for a functional DSM, broadband, skills, innovative SMEs, equity funding, public-private partnerships with the industry for future technologies are some examples.

The connected Digital Single Market needs to rely on efficient ICT including broadband infrastructure to achieve a digital transformation.

However, the broadband gap will not be entirely closed by (regulated) market forces. Given the large investments needed to upgrade the current connections to the next generation of digital networks – often based on fibre technology – there is a serious risk that market failure will rapidly increase the so-called digital divide across the European continent. A gap analysis on the funding needed to meet the EU broadband targets by 2020 estimates that, in the most optimistic scenario, the coverage target (30 Mbps for all) will be reached if €34 billion are invested, of which €21 billion from public sources. The estimate to reach the take-up target (half of the European households with 100 Mbps subscription) is €92.4 billion.

More generally, significant EU public funding is already earmarked for Digital Single Market infrastructures and innovative SMEs (including start-ups). The European Structural and Investment Funds (ESI Funds) which now have an increased focus in the areas of ICT and digital networks roll-out and support to innovation, skills and ICT uptake by SMEs, through the set-up of financial instruments are expected to programme around €21.4 Billion. The Connecting Europe Facility in the digital area is endowed with a limited budget of €1 billion for the period 2014-2020.

Actions to be financed under Horizon 2020 and the COSME programme are expected to contribute to the DSM Strategy. In the current programming period Horizon 2020 will devote approximately €12.5 billion to ICT research. Horizon 2020 will invest in developing innovative services and applications for the DSM, such as ICT enabled manufacturing (e.g. over €1 billion under the Factories of the Future PPP matched by industry investment. In addition, Horizon 2020 will also help companies and other types of organisation gain access to loans, guarantees and equity finance. The overall indicative budget for the seven-year period of COSME (2014-2020) is €2.3 billion.

Complementing current EU programmes, the newly created European Fund for Strategic Investment (EFSI) 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 (EIB) – EUR XXX - and the European Investment Fund (EIF) – EUR XXX - which is the leading European investor in venture and growth capital funds, and a critical provider of capital for Start-ups and SMEs, stimulating entrepreneurship and innovation.

Taking into account the experience of past under-absorption of EU funds programmed for investment in broadband, the Commission will work with the EIB, project promoters and Member States to ensure that available investment funds are maximised to the fullest (e.g. European Structural and Investment Funds; European Fund for Strategic Investment), including technical assistance for giving advice to project promoters and public authorities. The European Structural and Investment Funds can be strategically used to encourage the transposition of new legislation and the development of administrative capacities for an effective implementation of Digital Single Market initiatives in all EU regions. Together with the European Fund for Strategic Investment, financial instruments under Horizon 2020 and COSME, consideration will be given to pooling and enhancing private and public investments towards the Digital Economy. Ensuring adequate investment funding for broadband, innovative services and research is a shared responsibility between the EU, Member States and private partners.

[Poss. table to summarize the different funding schemes]
reform package foresees the transition to full e-procurement by October 2018. In many Member States, the transition has started at a slow pace, for different reasons: technical and managerial complexity, investments costs, lack of political will. The faster introduction of e-procurement would contribute to addressing some of these problems and produce efficiency gains. Contracting authorities that have already switched to e-procurement report savings of between 5% and 20%. EU wide e-procurement is expected to save EUR 50 billion annually. The Commission will also fully participate in the necessary public sector modernisation effort for its own services.

Businesses are held back by regulatory fragmentation and barriers which makes it harder for them to scale-up and operate cross-borders within the internal market. Many Member States have called for action to help companies by enabling them to be formed quickly - in 24 hours - and receive licences within month, ease restrictions for domain name registration, all company law requirements to be done electronically etc. Some have called for different (easier) requirements for start-ups. Improving the regulatory environment for business in general will also be one of the priorities of the upcoming Single Market Strategy. In this context, the Commission will work to support an early conclusion of the negotiations on the pending S-UP proposal (Societas Unius Personae - a national company law form for single-member private limited liability companies with a number of harmonised main requirements). The Commission considers that any established company should be able to expand its operations cross-border and be pan-European within a month, do this online, building on the interconnection of business registers and once-only principle. In order to accelerate digitisation of industry (Industry 4.0) and help SMEs and Start-ups build entrepreneurship, an innovation principle could be established as one of the rules of policy making in Digital Single Market.

As an alternative form of funding to traditional bank loans or issuing debt or equity, private equity and venture capital play an important role in the European economy. But risk-capital markets can often lack scale; this is the case not only for the stock exchanges specialised in financing high-growth companies, but also for risk-capital investment at the start-up or development stage of new enterprises or in high-technology companies. The EU has put in place a range of initiatives to support equity based finance, through regulatory vehicles such as the European Venture Capital Funds Regulation, which creates a cross border passport for raising funds and investing in businesses, through to public and public/private funds. Confronted with the current diversity of company statutes and related legal risks and cost across Europe, non-EU investors are less inclined to fund EU startups or require relocation to non-EU destinations. The Commission will therefore explore avenues to attract more venture capital in the context of its work on the Single Market Strategy and the Capital Markets Union.

The Commission will present a new e-Government Action Plan 2016-2020 and will inter alia (i) propose to make the European Interoperability Framework mandatory for public services, (ii) launch in 2016 an initiative with the engagement of Member States for demonstrating and piloting the 'Once-only' principle for businesses; (iii) work towards a ‘Single Digital Gateway’ to create a seamless, user friendly system for citizens and business and (iv) accelerate Member States' transition towards full electronic procurement and interoperable e-signatures. The Commission will also implement an ambitious e-government agenda on its own (e-signatures, e-procurement, digital first). The Commission will also make mandatory interconnection of business registers a reality by 2017 thereby allowing citizens and businesses to have greater access across borders to data about European companies. The Commission will further present proposals on facilitating access to finance for startups in particular in the context of the Capital Markets Union and the Single Market Strategy.

5. DELIVERING THE DIGITAL SINGLE MARKET

Achieving the Digital Single Market means delivering on the actions set out in this Strategy. The attached roadmap shows the initiatives to be developed as part of the Strategy, with a clear timetable for adoption and implementation as well as respective responsibilities. The Commission regards these as inter-linked and consistent with the scale of ambition the EU needs to achieve a Digital Single Market.
5.2. Effective Digital Single Market Governance

Reflecting the shared responsibility for delivery the Commission will deepen the cooperation with Member States and will engage in an ongoing dialogue with stakeholders to inform policy-making and to ensure effective implementation of the Strategy. This will benefit from the support of dedicated advisory and support groups, including a new National Digital Single Market Coordinators group as well as specific events. The Commission will also seek to improve the data, analysis and intelligence needed to underpin the Digital Single Market by pooling the relevant knowledge and making it easily accessible to the public. It will use and further develop its Digital Economy and Society Index indicator (DESI). The Commission will further report regularly on progress for the Strategy.

5.3. International dimension

For the EU to play an important role in the digital economy, our digital companies should be able to grow thanks to the opportunities offered by the scale of a completed Digital Single Market. Digital companies should also be able to grow beyond the internal market, in particular since digital business knows no borders and the digital markets with the biggest growth potential are outside the EU. However, our digital companies face barriers when attempting to access third country markets. This contrasts with the openness of the European market. Through our trade agreements, we have committed to providing the same treatment to non-European IT and telecom companies as to European companies. This openness and attractiveness should be maintained and developed further while the EU continues to press for the same openness and attractiveness from our trading partners by developing an ambitious and assertive digital trade policy.

Given its critical importance to the Digital Single Market, 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. It will work to develop a coordinated EU position on Internet Governance consistent with fundamental rights and democratic values.

1. CONCLUSION

Successful implementation depends on the political commitment of all actors concerned, including EU institutions, Member States and other stakeholders, including at regional and local level, in line with the principles of subsidiarity, proportionality and better regulation.

The EU must be able to react to unexpected events, seize new opportunities and anticipate and adapt to future trends. Whenever necessary, the Commission will use its right of initiative to set out an appropriate response to events.

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.

ROADMAP NEEDS TO BE UPDATED WITH ACTIONS FROM BOXES

DSM PHASES TO BE PUT IN

Annex: Roadmap for completing the Digital Single Market

<table>
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<th>Actions</th>
<th>Timetable</th>
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<td>Better access for consumers and businesses to digital goods and services across Europe</td>
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Propose simple and effective cross-border contract rules for consumers and businesses

Review the Regulation on Consumer Protection Cooperation and develop more efficient cooperation mechanisms

Launch an initiative in the area of parcel delivery with a focus on improving price transparency, enhanced regulatory oversight.

Launch a wide ranging review and a Competition Sector Inquiry to tackle discrimination against the consumer based on residence.

Propose a reform of the copyright regime

Review the Audio-visual Media Services Directive

Propose legislation to reduce the administrative burden on businesses arising from different VAT regimes

Creating the right conditions for digital networks and services to flourish

Propose a reform of the current telecoms rules

Carry out a comprehensive analysis of the role of platforms in the market

Launch initiative leading to possible proposal for combatting illegal content on the Internet

Review the e-privacy Directive

Propose the establishment of a Cyber Security contractual Public-Private Partnership

Maximising the growth potential of the Digital Economy

Launch a number of initiatives, including on data ownership, free flow of data/portability, e.g. between cloud providers, and interoperability

Launch a European Research Cloud

Adopt a Priority ICT Standards Plan

EU initiative of Skills for Employability and Competitiveness (Enhance the recognition of digital skills and qualifications and increase the level of ICT professionalism in Europe)

Make the European Interoperability Framework mandatory for public services

Launch an initiative with the engagement of Member States for demonstrating and piloting the 'Once-only' principle for businesses via a large scale pilot project and entrepreneur-take-up actions under Horizon 2020

Accelerate Member States’ transition towards full electronic procurement

Launch an initiative to make mandatory interconnection of business registers a reality by 2017