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# Strategic Plan 2016-2020\*

Directorate-General for Communications  
Networks, Content and Technology



DG Connect

\*The current Commission's term of office runs until 31 October 2019. New political orientations provided by the incoming Commission for the subsequent period will be appropriately reflected in the strategic planning process.

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# **PART 1. Strategic vision for 2016-2020**

## **A. Mission statement**

DG CONNECT conceives and implements the policies required to create a Digital Single Market for more growth and jobs, where citizens, businesses, and public administrations can seamlessly and fairly access and provide digital goods, content and services.

We foster a modern, secure, open, and pluralistic society building on our values such as democracy, freedom of expression and tolerance and Europe's cultural diversity, creativity and respect of creators' rights.

We help drive the digital transformation of European industry and public services through the use of innovative digital technology and support for the development of digital skills.

We strive to develop a long-term vision investing in potential technology breakthroughs and flagships, which can improve peoples' lives and to increase the competitiveness of the European economy at large and its key sectors.

We live our values as a creative, responsible and result-oriented European Union public service. We work on the best available evidence, and we cooperate closely with our stakeholders, our international partners and other EU institutions. We seek value for the taxpayer's money in all we do.

## **B. Operating context**

DG CONNECT works with the College and other Commission services to implement actions defined in the Digital Single Market Strategy. In this context we will deliver major policy and legislative initiatives in the next few years in light of dynamic technological and market developments. This involves evaluating, reviewing, and consolidating existing legislation and possibly proposing new rules. Close relations with the DG's institutional partners and the Member States will facilitate agreement by the co-legislators and implementation of European policies, including the swift transposition of new European rules into national law.

Key partner DGs are the Secretariat General, the Legal Service, the Research & Innovation Family DGs, in particular DG RTD, and other DGs involved in the DSM, in particular DG GROW, DG JUST, DG COMP and DG MOVE. We cooperate closely with major policy initiatives and partnerships, such as the Grand Coalition for digital jobs.

As regards the application of the existing legal frameworks, we monitor the implementation and enforcement of EU laws in Member States (such as the Regulatory Framework for Electronic Communications, the Audio Visual Media Services Directive, and the e-Commerce Directive). DG CONNECT is responsible for scrutinising draft regulatory measures by National Regulatory Authorities in the field of electronic communications.

The Union carries out actions aimed at encouraging cooperation between Member States, supporting and supplementing their action in areas such as the improvement of the knowledge and dissemination of the culture and history of the European peoples, artistic and literary creation, including in the audio-visual sector (Article 167 TFEU). The Creative Europe programme is managed with the support of the Education, Audio-visual and Culture Executive Agency.

DG CONNECT sets the strategy for Research & Innovation activities related to Information and Communication Technologies (ICT) within Horizon 2020. Information and Communication Technologies underpin innovation and competitiveness across private and public sectors and enable scientific progress in all disciplines. Horizon 2020 ICT-related topics cover the full innovation chain, from basic research to market uptake and can be found in all priorities of H2020, from 'Excellence in Science' to 'Industrial Leadership', to 'Societal Challenges'.

In the implementation of the ICT part of the Programme, DG CONNECT is supported by Executive Agencies. The implementation of Future Emerging Technologies (FET)-Open, Societal challenges on Inclusive, Innovative and Reflective Societies and on Secure Societies is delegated to the Research Executive Agency (REA) and the implementation of the SME instrument and the Fast track to innovation pilot to the Executive Agency for Small and Medium-size Enterprises (EASME). The Electronic Components and Systems for European Leadership Joint Undertaking (ECSEL JU) implements part of the H2020 programme in the field of micro and nanoelectronics.

DG CONNECT promotes public and private investment in digital infrastructures.

The telecommunications part of the Connecting Europe Facility (CEF) is dealing with Digital Service Infrastructure, funded through grants and implemented by the Innovation and Networks Executive Agencies; it supports broadband projects through financial instruments implemented in cooperation with the European Investment Bank. The CEF also deals with support activities and technical assistance in the area of broadband.

DG CONNECT is actively working with DG REGIO and DG AGRI on the European Structural and Investment Funds (ESIF) programmes to support their implementation by Member States and Regions in the area of ICT, in line with the Digital Single Market (DSM) strategy. This includes networking and technical assistance initiatives, in coordination with the European Investment Advisory Hub. The dialogue with Member States is also carried out in the context of the approval and implementation of the National (and regional) Broadband Plans.

DG CONNECT is also working with DG ECFIN, DG MOVE and DG ENER on the negotiation and implementation of the Investment Plan supported by the European Fund for Strategic Investments (EFSI). The Plan foresees the EFSI as counter-cyclical measure for the European economy with estimated financial contribution of up to 315 Billion Euro within 2015-2017 timeframe.

Our main Agency relations are BEREC (Body of European Regulators in Electronic Communications) and ENISA (European Union Agency for Network and Information Security). DG CONNECT also cooperates with relevant institutions and stakeholders in key partner countries. It defends the EU's or the European Commission's position in relevant international fora.

DG CONNECT systematically seeks to promote and support stakeholder engagement, both online and offline, with the aim of increasing ownership and accountability of the decision-making process. Specific groups of stakeholders include research & innovation organisations, ICT manufacturers and

service providers, the using industry and public sector (healthcare, car, energy, tourism, security, etc.), end-users (be they consumers, patients, students etc.), and civil society (think tanks, activists, privacy groups, etc.).

**C. Strategy**



DG CONNECT contributes to the following Commission General Objectives:

- "A Connected Digital Single Market" (Commission General Objective 2)
- "A New Boost for Jobs, Growth and Investment" (Commission General Objective 1).

The work on these General Objectives contributes to maximising the potential of digital technology for Europe's economy (for example in health, education or public procurement). The Digital Economy and Society Index (DESI), which combines more than 30 indicators and uses a weighting system to rank each country based on its digital performance, is the main analytical tool providing evidence input for the DG CONNECT European Semester contributions.

DG CONNECT attaches great importance to the integration of Research & Innovation and Policy activities as mutually supportive contributions to the Commission General Objectives.

## **A Connected Digital Single Market**

The Connected Digital Single Market (DSM) aims to make the EU's single market fit for the digital age – tearing down regulatory barriers and supporting content to move from 28 national markets to a single one. It creates a unique opportunity for the EU to be the driving force of the digital revolution and to compete globally on knowledge and innovation. Its completion is expected to add over 415 billion € to European Gross Domestic Product (GDP) and create nearly 4 million new jobs.

The DSM strategy also aims at implementing the Commission's policy to continue to work with determination to create jobs and foster growth and social progress in the EU. It will focus, in this respect, on a limited number of key interdependent actions that can only be taken at EU level, where there is a clear value-add from EU intervention, grouped under three pillars, with a very ambitious timeline:

- Make the DSM work for citizens and businesses;
- Put in place a regulatory framework to boost investments and competition in digital networks and services;
- Promote rapid digitalisation of European industries to gain competitiveness and modernise public services.

The following three Specific Objectives (1.1 - 1.3) reflect the three pillars of the DSM strategy. They are complemented by two further Specific Objectives (1.4 – 1.5) because of their powerful leverage effect in supporting the completion of the connected Digital Single Market.

### **Specific Objective 1.1: Digital goods and services are available to consumers and businesses across Europe**

DG CONNECT will contribute to the first pillar of the DSM, making cross-border commerce easier by tackling unjustified geo-blocking, introducing a modernised copyright framework and reviewing the Satellite and Cable Directive. Along with a review of the copyright legislation, the support policy of the EU, embodied in the Creative Europe programme, can also play a part, as can research and innovation tools.

### **Specific Objective 1.2: Electronic communications networks and services, digital content and innovative services benefit from favourable conditions and compete on a level playing field**

This Specific Objective corresponds to the second pillar of the DSM and aims at ensuring the right conditions for digital networks to grow. The Network Information Security (NIS) Directive will make the online environment more trustworthy and thus supportive to the smooth functioning of the EU

Digital Single Market. A wide-ranging review of the Telecom Framework will seek to ensure unrestrained connectivity, through fast broadband connections covering all of Europe and level the regulatory playing field between traditional telecoms operators and online service providers. A greater coordination of spectrum between Member States will help true pan-European communication services to take off. The existing rules within the audio-visual sector will be reviewed to take into account the potential of new technology, new business models, and new ways to watch such as on smartphones. An important move will be to assess the role of Internet platforms, including the role and responsibilities of online intermediaries. Besides the new Data Protection Regulation, actions will be taken to boost trust and an evaluation of the e-Privacy directive is underway.

**Specific Objective 1.3: The digital economy can develop to its full potential underpinned by initiatives enabling full growth of digital and data technologies**

This Specific Objective corresponds to the third pillar of the DSM and aims at ensuring that Europe's economy, industry and public sector take full advantage of what digitalisation offers.

DG CONNECT will mainstream digital innovations in industry, coordinating the work of industry and national platforms to ensure the full digitisation of Europe's industrial fabric. As data is a catalyst for growth and innovation, we will propose ambitious initiatives to promote the free flow of data within the EU, including by addressing the emerging issue of data ownership. We will explore the legal frameworks for autonomous systems, in particular safety and liability rules and the legal conditions to allow large scale testing in real life environments. We will develop European high-performance data infrastructures accessible to researchers, public administrations and industry, wherever they are in Europe. A European push is also needed to define priority ICT standards in order to achieve competitiveness and interoperability. Encouraging the uptake of the right digital skills across Europe remains a significant long-term challenge to address.

The ambition of the revised e-Government Action Plan is that all public administrations become open, inclusive and participatory, and are designed around borderless, citizen- and business-friendly digital delivery of public goods.

**Specific Objective 1.4: All Europeans enjoy effective world-class connectivity through future-proof and ubiquitous digital networks and service infrastructures as underlying basis for the digital society and data economy**

This Specific Objective aims at unlocking the investment that is necessary to build and maintain world-class networks that can handle fast-rising and fast-evolving demand. This will require adapting sector-specific rules (see Objective 1.2) and implementing existing instruments, such as the Directive on reducing the costs of broadband rollout. Where the market cannot deliver, EU financing instruments will be mobilised, including CEF for the deployment and modernisation of broadband networks at very high speeds and in rural areas.

DG CONNECT will take initiatives to boost the contribution of the Internet of Things (IoT) to the DSM, especially by engaging with Member States to support experimentation environments on new IoT architectures and services. In addition, DG CONNECT will take specific actions on 5G, such as enabling an efficient standardisation approach, fostering a forward-looking radio spectrum strategy, promoting new business models based on 5G, and ensuring timely investments and deployment of

5G infrastructures in Europe.

**Specific Objective 1.5: A modern, open and pluralistic society building on Europe's cultural diversity, creativity and respect of creators' rights and its values, in particular democracy, freedom of expression and tolerance**

This Specific Objective aims at implementing and further developing the audio-visual and media policy (including film heritage and external aspects), ensuring that the current regulatory environment of the audio-visual media services sector is respected, while preparing a strategy for addressing future developments (such as Connected TV), and at promoting respect for media pluralism and media freedom. This objective includes the need to strengthen independent reporting on EU issues from a European point of view through the media most favoured by the European citizens. Multimedia actions are taken in this context to ensure objective, sustainable sources of news with a pan European focus on television, radio and new media.

**A New Boost for Jobs, Growth and Investment**

This General Objective acknowledges the significance of digital technologies for job creation, growth and investment in Europe and aims at boosting the capability of business and society to rise to the digital transformation challenge. It aims to boost investment opportunities in research and innovation towards achieving potential scientific and technology breakthroughs, in particular through the Horizon 2020 programme and the use of Public Private Partnerships. Another important aspect is the implementation of an effective strategy for mainstreaming a start-up and digital entrepreneurship friendly approach in the activities of the DG.

**Specific Objective 2.1: Europe maintains its position as a world leader in the digital economy, where European companies can grow globally, drawing on strong digital entrepreneurship and performing start-ups and where industry and public services master the digital transformation**

As part of a package of measures foreseen under the third pillar of the DSM (see Objective 1.3), the European Strategy for Digital Industrial Leadership within a Digital Single Market will provide a comprehensive framework to enable European industry to benefit to the fullest extent from the opportunities offered by digitalization. It is complemented by an E-Government action plan on digital transformation of public services with a focus on business needs, i.e. solutions that are online, cross-border and interoperable by default. Linked to the strategy for Digital Industrial Leadership, the European Cloud Initiative will provide European science, industry and public authorities with world-class data and computing infrastructures and cloud-based services.

The StartUpEurope initiative will support the scaling up of successful digital start-ups and facilitation of young innovative companies' expansion across the EU.

**Specific Objective 2.2: Europe's research finds investment opportunities for potential technology breakthroughs and flagships, in particular through the Horizon 2020 programme and using Private Public Partnerships**

This Specific objective aims at harnessing the knowledge and innovative solutions deriving from the EU's Research and Innovation programmes to support the further deployment of the DSM as well as



the priority goals of job creation, economic growth and investment.

Since digital technologies underpin innovation and competitiveness across a broad range of market sectors, the topics addressed in the H2020 Work Programmes cover the ICT technology in a comprehensive way, from key enabling technologies to networking technologies, robotics, content and information management technologies. Pursuing the change initiated under Work Programme 2014-2015, activities will continue to promote more innovation-orientation to ensure that the EU industry remains strong in the core technologies that are at the roots of future value chains. H2020 Work Programmes will further continue supporting core ICT industries through roadmap-based PPPs. The work will contribute to maintaining and developing the technology leading edge in key areas such as electronics, photonics, embedded systems, computing, robotics, big data or network technologies and systems, in which the EU has and should keep major strengths.

### **c) Contribution to other General Objectives of the Commission**

In addition, DG CONNECT will monitor and contribute, but not to the same degree, to other General Objectives:

As regards the **Commission General Objective 3, "A Resilient Energy Union with a Forward-Looking Climate Change Policy"**, DG CONNECT is closely monitoring further developments towards a resilient Energy Union and contributes to the digitisation of the energy sector. Substantial benefits are to be achieved on both supply and demand side from applying digital technologies in the sector. Smart homes, meters and appliances are areas to be addressed in view of a forward-looking climate change policy.

DG CONNECT pursues the **Commission General Objective 10, "A Union of Democratic Change"**, following a structured approach to evidence-based and participatory policy making. We engage stakeholders from the outset in the co-creation of policy-relevant content as well as in enriching our evidence base for more accurate, efficient and transparent decisions making. The new EU eGovernment Action Plan (2016-20) will include measures aimed at increasing the transparency of government and engaging citizens, businesses and civil society in policy-making by further opening its decision-making and processes.

DG CONNECT is, in this respect, strongly committed to performance, accountability and transparency in its thrust to accompany the change that is brought about by the digital revolution. Public authorities neither know everything nor enjoy omnipotence in fixing problems or controlling the future. However, there are still many things to be done to better serve citizens. One of these is to further develop and promote the vision of Open Government, which DG CONNECT strives to fulfil in a way that is open, coherent, accountable, effective and participative. We consider it is easier to use digital techniques both for two-way communication and for collaborative delivery. As Better Regulation remains our compass in the Commission, the vision of Open Government allows for a wider and deeper set of changes.

## D. Key performance indicators (KPIs)

DG CONNECT has established a set of result indicators per specific policy objective, measuring the direct effect of the DG's intervention. They are set out in detail in the performance table in Annex 1. The following KPIs, chosen from the result indicators, reflect the most critical aspects of DG CONNECT's performance.

### 1) Increased portability of online content service

Baseline 2015	Target 2017
Substantial number of online content services remain locked in national territories.	100% paid-for subscriptions for online content services portable across borders 1 year after the adoption of the Regulation on portability (start of application in 2017).

### 2) Deployment of network infrastructure promoting a Gigabit society

Baseline June 2015	Interim Milestone 2020	Target 2022
-71 % coverage at 30 Mbps (EU citizens)	-100% coverage at 30 Mbps (EU citizens, DAE target)	Coverage of socio economic drivers with Gigabit connectivity allowing 1 Gbps download, 100 Mbps upload and very low latency. The targets for coverage will be determined in 2016 in the context of the Telecoms review.
-10% take-up at 100 Mbps (households)	- 50% take-up at 100 Mbps (households, DAE target)	

### 3) Leveraging private investment through Private Public Partnerships

Baseline 2014	Milestone 2017	Target
Level of private funding in Research and Development*	Additional private funding matching at least EU funding (i.e. 1.3 billion €)	2020: target agreed at the inception of the cPPPs
		Private investment at least 3 times the total EU funding for the cPPPs.

\* an ongoing study calculates this amount.

### 4) Patent applications and patents awarded as a result of H2020 grants for Future and Emerging Technologies (FET) and Leadership in Enabling and Industrial Technologies (LEIT)

Baseline 2014	Target
The Baseline is 'no results yet', as this is a new approach under H2020.	as defined in the Horizon 2020 Specific Programme
	3 patent applications per 10 MEUR funding.

### 5) Estimated residual error rate

Baseline 2014	Target
FP7: expected residual error rate: 3% CIP: 2,94% (limited sample)	As close as possible to 2% (within the range of 2-5%)

## **PART 2. Organisational management**

### **A. Human Resource Management**

DG CONNECT seeks to ensure that it disposes of adequately skilled and committed people to fulfil its mandate and reach its objectives while promoting diversity, equity, trust and respect. DG CONNECT management takes informed decisions on the organisational structure, staff allocation and planning based on the best use of available Human Resources (HR) data. The DG further develops an integrated and coordinated strategy to build a DG brand that continues to attract, develop and retain the right talent with the right skills or ability to learn.

The DG's HR strategy is built on four pillars:

1. **Organisational fitness:** a flexible design and development of our DG, exploiting agile working methods (e.g. task forces, working groups), focused on simplification efforts and continued cultural change towards new participatory ways of working and decision-making;
2. **Talent management:** a pro-active management of our talents throughout their career aimed at developing their skills, including targeted initiatives for our management;
3. **A welcoming workplace:** a collective effort to make the DG a great place to work based on staff engagement and the promotion of equal opportunities and diversity;
4. **Knowledge sharing:** a broad sharing of information that continues to empower staff and streamlines the internal communication channels in our DG, with a view to broad staff participation and the best possible data and knowledge as basis for all our work.

Recognising the specifically challenging times for HR management, our DG's strategy is consistent with a perspective of decreasing resources and increasing workload and includes actionable initiatives to seek to keep staff engagement and staff satisfaction as high as possible to ensure a timely and high-quality delivery of the political priorities defined by the College.

Priority actions for the period 2016-2020:

1. **Staff reduction:** the DG will have substantially to decrease its total population of officials and external staff as a result of the various taxations set out at Central level and budgetary constraints. At the same time, the DG needs skilled staff to deliver on new political priorities resulting from new legislative and policy-making activities for the completion of the DSM, including copyright and infrastructure spending under the Katainen package.
2. **Redeployment:** in light of the current resources constraints, the implementation of the political agreement to gradually increase the presence of Commission staff and services in Luxemburg and with a view to make the best use of our (decreasing) available talents to deliver on our political and operational priorities, our DG will exhaust all internal redeployment possibilities, including administrative support and coordination functions, and explore all possible internal efficiency gains.
3. **Skills development/task redefinition:** promotion of Learning & Development opportunities to ensure that staff is sufficiently versatile and properly equipped to deliver on the DG priorities.
4. **Staff engagement:** For the period 2016-2020, our DG will address possible dissatisfaction and disengagement due to increased workload as a result of resources and budgetary

constraints. Working groups at Director Level have proposed concrete actions to address key challenges identified by staff in 5 areas: transparency in HR process; workload and work life balance; career development and training; equal opportunities and gender balance and environment – building and logistics. In November 2015, the extended management team decided to prioritise the most relevant proposals of each area, including the design of the CONNECT University aiming to address the increasing importance of digital policy in many European policies across the Commission and support Commission staff in this respect.

5. Women in management: our DG performed a detailed diagnosis of the situation in March 2015 based on the historical evolution and possible scenarios based on current job market trends and identified a talent pool of women to develop their potential. As a result, our DG prepared an action plan to: attract applicants to management roles throughout a pro-gender balance recruitment process; launch of a 360° exercise and a women development programme including coaching and targeted training courses; revamp of an AD women network, including AST team leaders and monitor progresses through an info-graphics available to staff.
6. Staff well-being: our DG is fully committed to continue our well-being activities as a part of the Fit@work programme to promote work life balance and flexible working, improve work organisation, care and communication, and praise good work. In this perspective, our DG commits to 1/awareness raising on physical and mental health, leisure activities, work environment, healthy eating; 2/ focus EO&D Days 2016 on 'How to keep a healthy workplace in times of change'; 3/ coordinate activities with DGs on Beaulieu site; 4/ staff survey follow-up actions on work environment and work-life balance; 5/ invest on work-life balance as one specific focus of 40% women in management action plan.

<b>Objective: The DG deploys effectively its resources in support of the delivery of the Commission's priorities and core business, has a competent and engaged workforce, which is driven by an effective and gender-balanced management and which can deploy its full potential within supportive and healthy working conditions.</b>	
<b>Indicator 1 (data to be provided by DG HR):</b> Percentage of female representation in middle management.	
<b>Source of data:</b> HR Reporting	
<b>Baseline</b>	<b>Target</b>
01/01/2016	2019
28,9%	40%
<b>Indicator 2 (data to be provided by DG HR):</b> Percentage of staff who feel that the Commission cares about their well-being <sup>1</sup> .	
<b>Source of data:</b> Commission staff survey.	
<b>Baseline</b>	<b>Target</b>
2014	2019
33,5%	50% by end 2019 This target is in line with the DG CONNECT results in the former (2013) staff satisfaction survey and slightly above the current EC average.
<b>Indicator 3 (data to be provided by DG HR):</b> Staff engagement index.	

<sup>1</sup> This indicator may be replaced by a fit@work index on which DG HR is currently working.

<b>Source of data:</b> Commission staff survey.	
<b>Baseline</b> 2014	<b>Target</b> 2019
62	70 by end 2019 This target is in line with the DG CONNECT results in the former (2013) staff satisfaction survey and with the current EC average.

## B. Financial Management: Internal control and Risk management

**Overarching objective: The Authorising Officer by Delegation should have reasonable assurance that resources have been used in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions including prevention, detection, correction and follow-up of fraud and irregularities.**

The DG is responsible for implementing revenue and expenditure actions in accordance with the principle of sound financial management and for ensuring compliance with the requirements of legality and regularity. DG CONNECT endeavours to achieve the right balance between aiming for maximum performance and value-added for its priority policies while ensuring sound financial management.

To this end DG CONNECT has put in place the organisation structure and the internal control systems supported by a comprehensive risk analysis, which takes into account their cost-effectiveness. The primary purpose of assessing the costs and benefits of controls is to support internal management, fostering effective decision-making throughout the Commission. This in turn contributes to the efficient and economic use of resources. Focussing on the controls and risks associated with new proposals exposes the rationale behind the Commission's regulatory choices and supports its negotiating position. DG CONNECT has established a set of cost efficiency indicators to provide an overall assessment of the costs and benefits of controls. These indicators allow management to support their allocation of control resources, to adapt the frequency and intensity of controls taking into account the risk level and to draw a conclusion on the control cost-effectiveness and efficiency. Further fine-tuning of the indicators may be needed based on experience gathered.

DG CONNECT has set up internal control processes aimed at ensuring the adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programmes as well as the nature of the payments concerned. The main control objective is to ensure that the residual error rate is close to the cumulative level of 2% by the end of the programmes' implementation. However, for FP7 and CIP, it is accepted that the error rate will be above 2% given that major simplification measures positively impacting the error rate could only be introduced for the new generation of programmes and in particular H2020.

DG CONNECT has entrusted parts of its budget to other Commission services, Executive Agencies, a Joint Undertaking, the European Investment Bank (EIB) and a body linked to an Article 185 initiative. The DG is a parent DG of two regulatory agencies (ENISA and BEREC Office). In all these

cases, the supervision arrangements are based on the principle of controlling 'with' the relevant entity.

With regard to grants, particular emphasis is given to a trust based approach towards grant beneficiaries to remain attractive for research bodies and in particular SMEs. This requires in particular focusing additional controls, such as audits, on a risk based analysis.

The Research DGs adopted a common anti-fraud approach which started with FP7 and is deepened for H2020. A common approach guarantees not only a better efficiency of some measures, but also increases the chances of the EU services to effectively protect the EU's financial interest against fraudulent beneficiaries, in close cooperation with OLAF.

<b>Objective 1: Effective and reliable internal control system giving the necessary guarantees concerning the legality and the regularity of the underlying transactions</b>	
<b>Indicator 1: Estimated residual error rate</b>	
Where necessary specific residual error rates would be calculated for each programme managed or for expenditure with a common risk profile.	
<b>Source of data:</b> FP7/H2020 error rates established using the Common Representative Sample, CIP cumulative audit results Common Audit Service/DG CONNECT multi-annual ex-post control strategy, H2020/FP7/Non research audit strategies.	
<b>Baseline</b> 2014	<b>Target</b>
FP7: expected residual error rate: 3% CIP: 2,94% (limited sample)	As close as possible to 2% (within the range of 2-5%)
<b>Indicator 2: Estimated overall amount at risk for the year for the entire budget under the DGs responsibility.</b>	
<b>Source of data:</b> DG CONNECT Annual Activity Report.	
<b>Baseline</b> 2014	<b>Target</b>
The weighted average error rate relating to the legality and regularity for all DG CONNECT's expenditure lies between 3,0% and 4,2%. The resulting estimation of the amount at risk lies between 33,87 M€ and 47,77 M€.	No target
<b>Indicator 3: Estimated future corrections.</b>	
<b>Source of data:</b> DG BUDG data on past recoveries.	
<b>Baseline</b> 2014	<b>Target</b>
The total amount of the adjustment in favour of the Commission in 2014 for DG CONNECT is 7.653.917 € of which 7.117.793 € (93%) have been implemented until now	No target

<b>Objective 2: Effective and reliable internal control system in line with sound financial management.</b>
<b>Indicator 1: Conclusion reached on cost effectiveness of controls regarding the research budget entrusted to other programme implementing bodies (executive agencies, Joint Undertakings)</b>
<b>Source of data:</b> DG CONNECT Annual Activity Report.

<b>Baseline</b> 2014	<b>Target</b>
Yes	Yes
<b>Indicator 2:</b> Cost of controls over expenditure. <b>Source of data:</b> DG CONNECT Annual Activity Report.	
<b>Baseline</b> 2014	<b>Target</b>
The total cost of control correspond to 3,6% of the total operational payments made in 2014.	Observation period – no target defined because of the recent entry into force of H2020 and the related new control strategy (simplified legislation, ...) as well as the limited experience with this indicator.

<b>Objective 3: Minimisation of the risk of fraud through application of effective anti-fraud measures, integrated in all activities of the DG, based on the DG's anti-fraud strategy (AFS) aimed at the prevention, detection and reparation of fraud.</b>	
<b>Indicator 1:</b> Updated anti-fraud strategy of DG CONNECT, elaborated on the basis of the methodology provided by OLAF <b>Source of data:</b> DG CONNECT Anti-Fraud Strategy, Research Anti-Fraud Strategy.	
<b>Baseline</b> 2011/2015	<b>Target</b>
DG CONNECT Anti-Fraud Strategy adopted in 2011. Research Anti-Fraud Strategy adopted in 2015.	Update every 3-4 years, following the need for adaptation.
<b>Indicator 2:</b> Implementation of the Research Anti-Fraud Strategy related action plan.	
<b>Baseline</b> 2015	<b>Target</b> 2020
0%	90% implementation of the action plan

## C. Better Regulation

Better Regulation in the Commission is about ensuring that political decisions are prepared in an open, transparent manner, informed by the best evidence, and backed by the comprehensive involvement of stakeholders. DG CONNECT is committed to address and improve all aspects for policy-making with tailored support, new methods and suitable tools (in- and out-sourced, as necessary) as well as to develop the appropriate approach in the next five years to ensure high quality standards in our policy delivery.

The 'Better Regulation' Support functions cover the overall Better Regulation coordination and Impact Assessment support (including the Impact Assessment part of the Regulatory Fitness and Performance programme (REFITs)), Planning and REFIT coordination aspects, Public Consultations support, and Evaluation support (including the evaluation part of REFITs).

Five major legislative measures are currently wrought: the 2<sup>nd</sup> wave of copyright rules (including the revision of the Satellite and Cable Directive), Geo-blocking, Free Flow of data, Telecoms rules review (REFIT), and the revision of the Audio Visual Media and Services Directive (REFIT). Several implementation measures, programme evaluation and policy monitoring activities will be performed under this Commission mandate. These initiatives will need to comply with the Better

Regulation rules. The range of services needed span from providing specific training, to improving drafting, helping on consultation strategies or supporting the preparation of the intervention logic.

In addition, in 2016 work on the review of the ePrivacy Directive will start with Q1 2017 as adoption target. Since the ePrivacy Directive deals with aspects which are not covered by the General Data Protection Regulation (GDPR), a total repeal looks unlikely. It will be necessary to align the legal instrument with the GDPR (i.e. a Regulation or a combination of a Regulation and a Directive) and to coordinate the future provisions with those of other legislations (i.e. GDPR, NIS, Telecom Framework, and Media).

On the one hand, Better Regulation Support Units will provide closer support to Operational Units to constantly improve and step up DG CONNECT policy proposals, especially in a context where the regulatory role of the DG is increasing and DG CONNECT has a special responsibility to making EU legislation "digitally-checked" and "Internet-ready".

On the other hand, an important part of the effort will be devoted to bolster options comparison against the effectiveness, efficiency and coherence criteria, reinforce the evidence base and supporting methodologies in order to improve qualification and/or quantification of impacts and results wherever possible, as well as better describe problem statements. A stronger coherence check will be also conducted to better link impact assessments to evaluations/fitness checks and the intermediate stages of implementation/enforcement and annual monitoring. This will be done with a steady look at the process, the quality, but also at the coherence of our policy-making activities.

Besides instilling continuous quality improvement, and, under the guidance of the Secretariat General, regular knowledge and best practices exchange sessions will be organised along the years to learn from operation units' experience and share knowledge from and between policy officers.

DG CONNECT will also, in close association with the Secretariat General, stay in contact with Member States, in particular the rolling Presidencies, in order to assess how Better Regulation could be deployed in the EU in general as a tool to reduce cost and administrative burdens while designing new policies (e.g. the eGovernment Action Plan 2016-2020).

<b>Objective: Prepare new policy initiatives and manage the EU's acquis in line with better regulation practices to ensure that EU policy objectives are achieved effectively and efficiently.</b>		
<b>Indicator 1:</b> Percentage of Impact assessments submitted by DG CONNECT to the Regulatory Scrutiny Board that received a favourable opinion on first submission. <b>Source of data:</b> DG CONNECT (based on Regulatory Scrutiny Board reports)		
<b>Baseline</b> 2015	<b>Interim Milestone</b> 2016	<b>Target</b> 2020
68% = Commission average in 2014: We use the percentage of 2014 as the value for 2015 is 100 % (2 out of the 2 IA submitted) because this figure has limited significance as DG CONNECT had very few IAs in 2015.	Positive trend compared to the DG's 2014 situation.	Positive trend compared to the DG's 2016 situation.
<b>Indicator 2:</b> Percentage of the DG's primary regulatory acquis covered by evaluations and Fitness Checks not older than five years.		



Source of data: DG CONNECT		
Baseline 2015	Interim Milestone 2016	Target 2020
Percentage of the DG's primary regulatory acquis covered by retrospective evaluations and Fitness Checks not older than five years: 67%.	Positive trend compared to baseline.	Positive trend compared to interim milestone.

## D. Information management aspects

Most of DG CONNECT policies and regulations heavily rely on data, information and knowledge: from supporting broadband infrastructures to fostering digital skills, from funding research and innovation, to regulating the internet and media. Data, information and knowledge are therefore critical assets for the DG and are carefully managed using the appropriate infrastructures, tools, processes and skills.

Besides the key corporate tools to manage information and documents (HAN, NEWSROOM) DG CONNECT's data, information and knowledge assets are managed through the following local or shared IT systems:

- Social intranet and collaborative platform (CONNECTED)<sup>2</sup> shared with the JRC and used at DG CONNECT notably for sharing information, encouraging co-creation and cross-silo working, discussions on issues of policy but also personnel, and also specific work-related tasks such as developing country-based information sets, creating permanent and ad hoc discussions spaces, drafting of agendas and minutes of meeting, replies to "EP Questions", replies to "Commissioner correspondence", "Mission reports", "Meeting reports".
- Stakeholders Relationship Management (SRM) used locally in a pilot phase to amalgamate and share information from various existing data bases on our many stakeholders.
- FP7 legacy and Horizon 2020 systems storing information on grant beneficiaries, projects and deliverables (the latter being already shared among the research family DGs).
- Systems to manage policy and regulatory data (for instance on Broadband Infrastructures data)
- Document repositories based on SharePoint and wikis.

A minor percentage of data is externalised to external suppliers, namely data for the Digital Agenda indicators and the Global Internet Policy Observatory platform to manage knowledge on Internet Governance.

The DG was the first to implement a "Digital First" communication strategy, cutting the use of paper to one of the lowest levels in Commission and developing a web site with 95% less content, but managed by a professional editorial process that is now the model for Europa 2.0.

DG CONNECT has a data analytics capacity to serve internal needs, for instance to process large quantities of stakeholder feedback data, to analyse FP7/H2020 deliverables and participants and extract strategic information, to support the impact assessment of policies and programmes, etc.

<sup>2</sup> CONNECTED is a pilot project serving mostly CONNECT and JRC. The pilot phase should be continued under the business ownership of JRC and with the technical support of DIGIT.

Processes for document management rely on corporate practices. The Document Management Officer (DMO) and the network of DMOs are kept regularly informed and engaged in enforcing the application of corporate rules within the services.

Finally, as far as its working culture is concerned, DG CONNECT has been a pioneer and change agent in the development of (a) participative techniques (by co-creating with stakeholder input both the evidence base for our priority actions and the key performance indicators we attach to them), (b) regular contacts on all DG CONNECT policies with interested stakeholders in all Member States ("Going Local"), (c) the creation of a more interactive stakeholder relationship around our work, involving a developed social media and engagement strategy based around a hub & spoke system managed by the communication unit; and (d) the use of novel platforms for co-creation and cooperation ("CONNECTED").

<b>Objective: Information and knowledge in DG CONNECT is shared and reusable by other DGs. Important documents are registered, filed and retrievable</b>	
<b>Indicator 1:</b> Percentage of registered documents that are not filed <sup>3</sup> (ratio) <b>Source of data:</b> Hermes-Ares-Nomcom (HAN) <sup>4</sup> statistics	
<b>Baseline</b> 2015	<b>Target</b>
3,07 %	0 %
<b>Indicator 2:</b> Number of HAN files readable/accessible by all units in the DG <b>Source of data:</b> HAN statistics	
<b>Baseline</b> 2015	<b>Target</b>
98,63 %	95% <sup>5</sup>
<b>Indicator 3:</b> Number of HAN files shared with other DGs <b>Source of data:</b> HAN statistics	
<b>Baseline</b> 2015	<b>Target</b>
22,55 %	95% <sup>6</sup>
<b>Indicator 4:</b> Percentage of units using collaborative tools to manage their activities <b>Source of data:</b> CONNECTED	
<b>Baseline</b> 2015	<b>Target</b>
95% <sup>7</sup>	100% <sup>8</sup>

### E. External communication activities

DG CONNECT uses a joined-up, digital-first communications to support the delivery of DSM initiatives and policy actions and those related to the Digital Economy and Society. The DG leads

<sup>3</sup> Each registered document must be filed in at least one official file of the Chef de file, as required by the e-Domec policy rules (and by ICS 11 requirements). The indicator is to be measured via reporting tools available in Ares.  
<sup>4</sup> Suite of tools designed to implement the e-Domec policy rules.  
<sup>5</sup> HR and OLAF files remain restricted, this is why 100% is not the target  
<sup>6</sup> HR and OLAF files remain restricted, this is why 100% is not the target  
<sup>7</sup> According to the most recent figures, 95% of staff are at least "readers", while 70% are "contributing".  
<sup>8</sup> All units are encouraged to use collaborative tools but, some categories of personnel (e.g. ushers) are not concerned.

on, and has a coordinating role in communication actions related to the DSM. Our communications and engagement approach is considered a model for the European Commission.

In 2014/15, DG CONNECT ensured that communication was at the core of the DSM strategy, by including a communications narrative from the earliest stage of the policy formation process. In 2016-2020 DG CONNECT will

- continue to lead/coordinate the DSM sub-group of the Commission's External Communications Network, coordinating planning, sharing messages, communications tools and approach between DSM family DGs;
- strengthen its engagement with local, regional and national stakeholders on DSM issues by leading the DSM "going local" outreach programme, involving participants from all DSM family DGs;
- work closely with the spokesperson service, the Commissioner's and Vice President's Communications advisers to develop the DSM communication narrative, and to define and implement related communication strategies related;
- continue to monitor and analyse the impact of our communications actions and adapt the approach as needed.

**Objective: Citizens perceive that the EU is working to improve their lives and engage with the EU. They feel that their concerns are taken into consideration in European decision making and they know about their rights in the EU.**

**Indicator 1: Percentage of EU citizens having a positive image of the EU**

Definition: Eurobarometer measures the state of public opinion in the EU Member States. This global indicator is influenced by many factors, including the work of other EU institutions and national governments, as well as political and economic factors, not just the communication actions of the Commission. It is relevant as a proxy for the overall perception of the EU citizens. Positive visibility for the EU is the desirable corporate outcome of Commission communication, even if individual DGs' actions may only make a small contribution.

**Source of data:** Standard Eurobarometer (DG COMM budget) [monitored by DG COMM [here](#)].

Baseline	Target
Q4 2014	2020
Total "Positive": 39% Neutral: 37 % Total "Negative": 22%	Positive image of the EU ≥ 50%

**Indicator 2: Composite index: How people interacted with us on the base of DG CONNECT communication activities?**

**Source of data:** Collated monitoring data collected by DGs from DG COMM Engagor Account

Baseline	Target
100% of the targets set for the previous years (which represent about 60-80% of targets of the following year). The index is the weighted ratio of partial targets; each of the targets is increased yearly by 20-30%.	100% of set targets for the current year (previous years targets are increased by 20-30% in average).

# Annexes

## Annex 1. Performance tables

### General objective: A Connected Digital Single Market

**Impact indicator 1: Number of Member States above the value 0.6 in Digital Economy and Society Index (DESI).**

Definition: The Digital Economy and Society Index (DESI) is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness. The closer the value is to 1, the better.

Source of the data: <https://digital-agenda-data.eu/datasets/desi/visualizations>

Baseline 2014	Interim Milestone 2017                                  2019		Target 2020
13	20	24	28
Planned evaluations: N/A			

### Specific objective 1.1: Digital goods and services are available to consumers and businesses across Europe.

**Result indicator 1: Increased portability of online content service.**

Source of data: Impact assessment accompanying the proposal of Regulation on portability. Measurement every 2 years, as part of the monitoring of the impact of the legislation, comprehensive assessment 5 years after the start of application; data sources will be existing ones (e.g. European Audio-visual Observatory), data provided by online content service providers or right holders and possible specific studies or Eurobarometer

Baseline 2015	Target 2017
Substantial number of online content services remain locked in national territories.	100% paid-for subscriptions for online content services portable across borders 1 year after the adoption of the Regulation on portability (start of application in 2017).
Planned evaluations: N/A	

**Result indicator 2: New legislation to tackle unjustified geo-blocking is in place.**

Source of data Roadmap for completing the DSM.

Baseline 2015	Interim Milestone 2016                                  2017		Target 2017
DSM Strategy adopted by the Commission.	Legislative proposal to tackle unjustified geo-blocking.	Adoption of the legislation by EP and Council.	Entry into force of the legislation and transposition in national law in all Member States.
Planned evaluations: Assuming that the new legislation will enter into force in 2017, the first assessment has to be made in 2020 and then every three years. The Commission will need to present an evaluation report and propose an update if changes in the legislative or the technological environment warrant it.			

**Specific objective 1.2: Electronic communications networks and services, digital content and innovative services benefit from favourable conditions and compete on a level playing field.**

**Result indicator 1: Future-friendly regulatory framework for electronic communications is in place in Member States.**

**Source of data:** Roadmap for completing the DSM.

Baseline 2015	Interim Milestone		Target 2020
	2016	2018	
Public Consultation	Adoption of the legislative proposal by the Commission	Adoption of legislation by EP and Council.	Transposition in national law in all Member States by 2020.
<b>Planned evaluations:</b> N/A			

**Result indicator 2: Number of connected devices in the EU, impacting the IoT market size.**

**Source of data:** Global System for Mobile Association, industry analysis (International Data Corporation)

Baseline 2016	Interim Milestone 2018	Target 2020: Target is based on industrial forecasts
500 million phones and 100 million machine to machine devices	2 billion connected devices	Multiplication by 10 in 2020, about 5 billion connected devices in Europe, 5 devices average per citizen.
<b>Planned evaluations:</b> N/A		

**Result indicator 3: European agreement of at least 1 GHz identified above 6GHz for 5G IMT 2020 allocation in 2019.**

**Source of data:** International Telecommunication Union, World Radio communication Conference decisions, work programme of the European Conference of Postal and Telecommunications Administrations, EU research.

Baseline 2015	Target
0 MHz available for 5G above 6 GHz.	2019: Based on running research and use case as e.g. developed in project Mobile Enablers for 2020 Information Society (METIS) flagship 5G initiative, in the context of WRC 2019 preparatory actions. 1 GHz minimum.
<b>Planned evaluations:</b> N/A	

**Result indicator 4: Policy instruments available for the public and private sector actors to invest in Open Service Platforms (OSP). Market actors consolidated by the use of FIWARE and supported by a number of significant industrial companies to reach an appropriate penetration in several markets.**

**Source of data:** Open Service Platforms study, FIWARE Core Industry Group. Continuous assessment will be carried out by projects selected under the WP 2016 in collaboration with the FIWARE foundation (in-house assessment based on the data sources listed above).

Baseline 2015	Interim Milestone		Target 2020
	2017	2019	
- No Member States programmes on OSP - 4 large Telco companies,	- At least one Member State programme on OSP - 6 large companies	- Increase in Member States programmes on OSP - 6 large companies	Streamlining European OSP industry policy across all Member States, including innovation funding actions.

- 5000 people in the FIWARE ecosystem.	- 5000 people in the FIWARE ecosystem	- Increase beyond 5000 people in the FIWARE ecosystem	
<b>Planned evaluations:</b> N/A			

**Result indicator 5: Entry into force of a new legal framework for Audio-visual Media Services Directive (AVMSD).**

**Source of data:** Roadmap for completing the DSM.

Baseline 2015	Interim Milestone		Target 2019
	2016	2017	
Public consultation	Adoption of the legislative proposal by EC.	Adoption of legislative proposal by EP & Council.	All Member States have transposed directive.
<b>Planned evaluations:</b> N/A			

**Result indicator 6: Transposition of legislative acquis in Network Information Security (NIS) and e-Privacy.**

**Source of data:**

Baseline 2015	Interim Milestone		Target 2022
	2016	2018	
Political agreement on NIS Directive	Adoption of the NIS Directive by EP and Council	1) All Member States have transposed NIS Directive 2) Adoption of the revised ePrivacy Directive	2) All Member States have transposed revised ePrivacy Directive.
<b>Planned evaluations:</b> ePrivacy review.			

**Result Indicator 7: Notified Electronic identifications (eIDs) by Member States to the Commission: Number of Member States that notify an eID scheme to the Commission under the eIDAS Regulation.**

**Source of data:** Electronic identification and trust services (eIDAS) Regulation.

Baseline Q4 2015	Interim Milestone		Target 2018 (all Member States must recognise the notified schemes under the eIDAS Regulation)
	Q4 2016	Q4 2017	
0	7	13	All Member States
<b>Planned evaluations:</b> N/A			

**Specific objective 1.3: The digital economy can develop to its full potential underpinned by initiatives enabling full growth of digital and data technologies.** Related to spending programme: H2020

**Result indicator 1: Actions to digitise European industry**

**Source of data:**

Baseline 2015	Target 2020
European industry not prepared for the challenges	Roll-out of actions and establishing digital innovation

posed by digitalisation	hubs in every region
Planned evaluations: N/A	

**Result Indicator 2: Number of TOP10 supercomputers installed in the EU by 2020.**

Source of data: <http://www.top500.org>

Baseline 2015	Interim Milestone 2018	Target 2020
1	2 in TOP10	3 in Top 10
Planned evaluations: Horizon 2020 ex-post evaluation of the Research Infrastructure part in 2022		

**Result indicator 3: Removal of legislative and regulatory obstacles at Member States' level to the free flow of data.**

Source of data: Two studies on "Facilitating cross-border data flow in the DSM"

Baseline 2016	Interim Milestone		Target 2020
	2016	2018	
As identified by the two studies on "Facilitating cross-border data flow in the DSM" – data available in Q4 2016.	Adoption of the legislative proposal by EC.	Adoption of legislative proposal by EP and Council.	Removal of legislative and regulatory obstacles at Member States' level to the free flow of data by 2020.
Planned evaluations: N/A			

**Result indicator 4: Interoperable IoT solutions developed for automotive market.**

Source of data: European Road Transport Research Advisory Council, 5G PPP, industry.

Baseline 2015	Interim Milestone 2016	Target 2020: Target conforms to automotive industry plans
6 early pilots for connected and autonomous cars.	Large-scale pilots showcasing Society of Automotive Engineers autonomy level 4 or higher in at least 10 Member States.	Availability of infrastructure for connected cars; e.g. Long-Term Evolution (LTE)-V 5G upgradable.
Planned evaluations: N/A		

**Result indicator 5: New Data framework for connected automated driving and energy efficient smart homes.**

Source of data: Support action from 2015 Transport call or 2014 Smart cities call.

Baseline 2015	Target 2020
None.	The framework is used by 10 major companies in at least 5 different countries.
Planned evaluations: N/A	

**Result indicator 6: Citizens and businesses can access eGovernment services in any country of the EU, regardless of their country of origin.**

Source of data: CEF Digital.

Baseline 2014/15	Interim Milestone 2016	Target 2020: as listed in CEF Digital and defined in annual Work Programmes
CEF Work Programmes 1 and 2 adopted.	Launch of 4 sectoral Digital Service Infrastructures (DSIs) reusing building block DSIs (eProcurement, Business Registers Interconnection Systems, European Energy Service Initiative, eJustice).	All CEF building block DSIs (eID, eDelivery, eSignature, eInvoicing, Automated Translation) are effectively reused by all Member States and integrated in all CEF-funded domain-specific DSIs.
Planned evaluations: N/A		

**Specific objective 1.4: All Europeans enjoy effective world-class connectivity through future-proof and ubiquitous digital networks and service infrastructures as underlying basis for the digital society and data economy.**

Related to spending programmes: Connecting Europe Facility (CEF), H2020

**Result indicator 1: Ensure favourable conditions towards full deployment of 5G networks, notably by a 5G PPP investment reaching 700 M€ matched by 5 times private investment.**

Source of data: Industry roadmaps.

Baseline 2015	Interim Milestone 2017                      2020		Target 2022: This is in line with industry roadmaps
Availability of 4 G networks based on "Long term evolution (LTE)" standards in all Member States 129 M€ committed as per phase 1 of 5G PPP investment.	283 M€ committed after implementation of phase 2.	First 5G service introduction in at least 1 Member State	Availability of 5G full solutions including operations of bands above 6GHz in at least 5 Member States.  520 M€ committed for Phase 3 implementation.
Planned evaluations: N/A			

**Result indicator 2: Deploying of network infrastructure enabling the Gigabit society to socio-economic drivers**

Source of data: DESI Index /scoreboard and industry reports.

Baseline June 2015	Interim Milestone 2020	Target 2022
- 71 % coverage at 30 Mbps (Digital Agenda Europe (DAE) target) - 10% Take-up at 100 Mbps (DAE target)	- 100% coverage at 30 Mbps (EU citizens, DAE target) - 50% take-up at 100 Mbps (households, DAE target)	Coverage of socio economic drivers with Gigabit connectivity allowing 1 Gbps download, 100 Mbps upload and very low latency. The targets for coverage will be determined in 2016 in the context of the Telecoms review.
Planned evaluations: N/A		



**Specific objective 1.5: A modern, open and pluralistic society building on Europe's cultural diversity, creativity and respect of creators' rights and its values in particular democracy, freedom of expression and tolerance.**

Related to spending programme: Creative Europe

**Result indicator 1: Share of European works in linear broadcast services.**

**Source of data:** Second report on the application of Articles 16 and 17 of the AVMSD for the period of 2011-12.

Baseline 2012	Target 2020
64,1% (average share on European level).	65% (average share on European level) A mature market that seems to have reached its level of saturation, so stability to be expected with a potential minor increase.
<b>Planned evaluations:</b> N/A	

**Result indicator 2: Share of European films in the catalogue of on-demand services.**

**Source of data:** European Audio-visual Observatory – Report on the origin of Films in Video on Demand catalogues in the EU (November 2015).

Baseline 2015	Target 2020
27% (average share)	30% (average share)
<b>Planned evaluations:</b> N/A	

**Result indicator 3: Share of non-national European works in linear broadcast services.**

**Source of data:** Study on the implementation of the provisions of the Audio-visual Media Services Directive concerning the promotion of European works. Next study on the promotion of European works.

Baseline 2010	Target 2020
8,1% (average share)	10% (average share)
<b>Planned evaluations:</b> N/A	

**Result indicator 4: Share of non-national European films in the catalogues of on-demand services.**

**Source of data:** European Audio-visual Observatory – Report on the origin of Films in Video on Demand catalogues. Next study on the promotion of European works

Baseline 2015	Target 2020
21% (average share)	25% (average share)
<b>Planned evaluations:</b> N/A	

**Result indicator 5: New legislation for web accessibility in place in Member States.**

**Source of data:** Roadmap for completing the DSM.

Baseline 2015	Interim Milestone 2016	Target 2019
Proposal for a Directive on the Accessibility of Public Sector Bodies' Websites adopted in 2012.	Adoption of Directive by EP and Council.	Transposition in national law in all Member States
<b>Planned evaluations:</b> N/A		

## General objective: A New Boost for Jobs, Growth and Investment

**Impact indicator 1: Europe 2020 target: Percentage of EU GDP invested in R&D (combined public and private investment).**

Source of data:

Baseline 2012	Target 2020
2.01%	3%
Planned evaluations: N/A	

**Specific objective 2.1: Europe maintains its position as a world leader in the digital economy, where European companies can grow globally, drawing on strong digital entrepreneurship and performing start-ups and where industry and public services master the digital transformation.**

Related to spending programme(s):  
Horizon 2020

**Result indicator 1: H2020 to become an important source of innovation for young companies and dynamic SMEs in pursuit of excellence by maintaining at least the current percentage of H2020 ICT budget dedicated to innovation activities**

Source: internal DG CONNECT statistics.

Baseline 2015	Interim Milestone 2017	2019	Target 2020
45% in 2015	45%	45%	45%
Planned evaluations: N/A			

**Result indicator 2: Established platform for national cybersecurity industry to cooperate at European level**

Source of data:

Baseline	Interim Milestone 2017	Target 2020
None	Contractual Public Private Partnership established and working on Research and Innovation implementation	Industrial cooperation extended to all industrial aspects (standardisation, certification, investment, skills...).
Planned evaluations: N/A		

**Result indicator 3: Number of cities involved in replication and /or dissemination of solutions developed under the European Innovation Partnership on Smart Cities and Communities and/or H2020.**

Source of data: The value of this indicator will be monitored by a support action from the 2014 Smart Cities call.

Baseline 2015	Target 2020
0 cities.	50 cities: based on the requested replication rate in H2020 Smart Cities lighthouse projects.
Planned evaluations:	

**Result indicator 4: Number of pilot projects launched for Open Government activities (including eParticipation, co-creation) and Once Only Large Scale Pilot (according to DSM).**

**Source of Data:** H2020 WP SC6. In 2018 (midterm review of OOP pilot) and 2019 (assessment of the need for legal measures).

Baseline 2015	Interim Milestone 2016	2018	Target 2019
Adoption of H2020 WP 2016-17 with relevant Open Government objectives and calls.	Launch of 4-5 Open Government projects (H2020 WP2016/17) and 1 large-scale pilot to test implementation of Once-Only Principle (OOP) for businesses across borders (H2020 WP2016/17).	Midterm review of pilots and OOP pilot.	20 projects launched. Assessment of necessity for legal measures of OOP completed.

**Planned evaluations:** The two kinds of the 2016 projects will undergo annual reviews. In addition, the second review in 2018 will be a midterm review that will allow carrying out an assessment of the need to undertake some legal / legislative measure regarding the OOP in 2018-19.

**Specific objective 2.2: Europe's research finds investment opportunities for potential technology breakthroughs and flagships, in particular through the Horizon 2020 programme and using Private Public Partnerships.**

Related to spending programme:  
Horizon 2020

**Result indicator 1: Future and Emerging Technologies: Number of publications in peer-reviewed high-impact journals per 10 M€ of EU funding (defined in H2020 Specific Programme Regulation).**

**Source of data:** Reporting done by H2020 beneficiaries via Common Grant Management System (SYGMA) available through CORDA (RTD/CSC).

Baseline	Target 2020
N/A new approach adopted under H2020	25 per 10 M€

**Planned evaluations:** Horizon 2020 mid-term and ex-post evaluations; 2017 and 2022; Horizon 2020

**Result indicator 2: Reinforcing industrial partnerships and strengthened cloud and software research that will enable technological capacity building and wide take up of cloud in Europe.**

**Source of data:** Strategic Research and Innovation Agenda to be developed by stakeholders by mid-2016

Baseline 2014	Interim Milestone 2018	Target 2020
174 M€ investment from H2020 calls 2014/16	314 M€ (cumulative)	384 M€ (cumulative). Further leveraging public funding to secure additional private investments and potential ESIF funding.

**Planned evaluations:** N/A

**Result indicator 3: Leveraging private investment through Contractual Private Public Partnerships.**

**Source of data:** Internal Commission plans and contractual arrangement signed with the associations.

Baseline 2014	Interim Milestone 2017	Target 2020: target agreed at the inception of the cPPPs
Level of private funding in Research and Development*	Additional private funding matching at least EU funding (i.e. 1.3 billion €)	Private investment at least 3 times the total EU funding for the cPPPs

**Planned evaluations:** H2020.

\* an ongoing study calculates this amount

**Result indicator 4: Increase development of networks beyond 5G technologies, exploit spectrum above 90 Ghz up to 1Thz for mobile communications, and invent novel architectures and systems for wireless communications.**

**Source of data:** H2020 Future Internet WP2016/17, Network technologies consultations for WP2016/17, Network2020 beyond 5G white paper, WP2016/17.

Baseline 2015	Interim Milestone 2017	Target 2025
18 M€ for Networking research Beyond 5G; Long term R&D to support the 1000+ constituency that forms the European Technology Platform	72 M€ (cumulative)	200 M€ (cumulative) to be commensurate with required efforts to develop technologies beyond 5G
<b>Planned evaluations:</b> Horizon 2020 mid-term and ex-post evaluations 2017 and 2022.		

**Result indicator 5: Industrial strategy for Next Generation Internet. Maximise the impact of the current PPPs by integration of the key outcomes into a Next Generation Internet objective. As a very large innovation policy initiative it is a project of important European value beyond 2020.**

**Source of data:** FIWARE ecosystem.

Baseline 2016	Interim Milestone 2017	2019	Target 2020
Concept development	Start developing the industrial strategy and policy support ecosystem. Allocation of funds.	Interim outcomes European industry policy impact	Adoption of the industrial strategy for the Next Generation Internet.
<b>Planned evaluations:</b> Final formal Future Internet PPP impact evaluation planned for 2017.			

**Result indicator 6: Patent applications and patents awarded as a result of H2020 grants for Future and Emerging Technologies (FET) and Leadership in Enabling and Industrial Technologies (LEIT).**

**Source of data:** CORDA data warehouse (data collected by CSC).

Baseline 2014	Target (as defined in the Horizon 2020 Specific Programme)
N/A: this is a new approach under Horizon 2020.	3 patent applications per 10 M€ funding.
<b>Planned evaluations:</b> Horizon 2020 mid-term and ex-post evaluations; 2017 and 2022; Horizon 2020.	

**Result indicator 7: Leveraged investment from SMEs, industry, public bodies and Non-Governmental Organisations in the Active & Assisted Living Programme and H2020 Societal Challenge 1 topics.**

**Source of data:** Cordis+ Active & Assisted Living Programme funding reports.

Baseline 2015	Target 2020
28 M€	160 M€
<b>Planned evaluations:</b> H2020	

## Annex 2. Glossary

### A

- AVMSD= Audio-visual Media Services Directive

### B

- BEREC= Body of European Regulators in Electronic Communications

### C

- CEF= Connecting Europe Facility
- CIP= Competitiveness and Innovation Framework Programme
- cPPP= Contractual Public Private Partnership
- CSC= Common Support Centre

### D

- DAE= Digital Agenda for Europe
- DESI= Digital Economy and Society Index
- DMO= Document Management Officer
- DSI= Digital Service Infrastructure
- DSM= Digital Single Market

### E

- EACEA= Education, Audio-visual and Culture Executive Agency
- EASME= Executive Agency for Small and Medium-size Enterprises
- ECSEL JU= Electronic Components and Systems for European Leadership Joint Undertaking
- EFSI= European Fund for Strategic Investments
- EIB= European Investment Bank
- eID= Electronic identifications
- eIDAS Regulation= Electronic identification and trust services Regulation
- ENISA = European Union Agency for Network and Information Security
- ESIF= European Structural and Investment Funds

### F

- FAIR Committee= Fraud and Irregularities in Research Committee
- FET= Future Emerging Technologies
- FP Research= Framework Programme for Research

### G

- Gbps= Gigabits per second
- GDP= Gross Domestic Product
- GDPR= General Data Protection Regulation

### H

- HAN= Hermes-Ares-Nomcom

### I

- IA= Impact Assessment
- ICT= Information and Communication Technologies
- IoT= Internet of Things
- ICS= Internal Control Standard

#### **L**

- LEIT= Leadership in Enabling and Industrial Technologies
- LTE= Long-Term Evolution

#### **M**

- Mbps= Megabits per second
- M€= million Euros

#### **N**

- NIS= Network Information Security

#### **O**

- OOP= Once-Only Principle
- OSP= Open Service Platforms

#### **P**

- PPPs= Private Public Partnerships

#### **R**

- R&D= Research & Development
- RAFS= Research Anti-Fraud Strategy
- REA= Research Executive Agency
- REFIT= Regulatory Fitness and Performance programme

#### **S**

- SME= Small and medium-sized enterprises
- SRM= Stakeholder Relations Management

#### **W**

- WP= Work Programme
- WRC= World Radio communication Conference