Ref. Ares(2016)7087045 - 20/12/2016



Management Plan 2017

Directorate-General for Communications Networks, Content and Technology



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The digital revolution has dramatically changed the way we communicate, the way companies deliver services and even how public administrations work. What we are witnessing is how digital is now profoundly changing the more traditional industrial sectors.

A Connected Digital Single Market (DSM) is one of the top priorities of the Commission's mandate. In his speech on the State of the Union of September 2016, President Juncker emphasised the importance of digital technologies and digital communications for Europe to empower its citizens and businesses. Releasing the full additional growth potential of a connected DSM by completing the implementation of the DSM Strategy will remain high on the agenda.

The DSM is one of Europe's main engines for growth and job creation and a key to investment and increasing European competitiveness. To reap all its benefits, it is crucial for its legislation to be transparent, simple and based on the most efficient tools.

The present Management Plan implements the strategic priorities set out in DG CONNECT's Strategic Plan 2016-2020.

The first overarching goal is to realise very quickly the three pillars of the Digital Single Market, as set out in the Strategy presented in May 2015: 1) improving access to online goods and services across Europe, 2) digital networks and innovative services and 3) maximizing the growth potential of the Digital Economy.

<u>"A Connected Digital Single Market" is the first General Objective of DG CONNECT</u>, which is translated into five Specific Objectives embodying a detailed set of actions, which all contribute to it in an integrated and consistent way.

The delivery of the specific outputs will create the conditions whereby European citizens can enjoy the same access to high quality digital services across borders, and European companies can compete globally, start-ups and Small and medium-sized enterprises (SMEs) can grow, and the results of European Research & Innovation (R&I) investment can be translated into successful products and services on the world markets.

Following the adoption, in 2016, of several legislative proposals aiming at eventually completing the DSM, DG CONNECT will strive to facilitate negotiations between the European Parliament and the Council in order to advance swiftly on the proposals already put forward, including copyright, geo-blocking, portability, audio-visual media services, telecommunications, the use of the 700 MHz band for mobile services and the recent proposal on the WiFi4EU voucher scheme for local authorities. All these proposals have been prioritised by the Commission, considering it most important to advance quickly on them, enabling the Union to turn proposals into action and deliver where it is most needed.

Apart from legislative action, the DSM Strategy also calls for measures to coordinate action on EU and national level to enhance competitiveness of the EU industry. For instance, the 5G Action Plan, adopted as a part of the telecom package, aims at facilitating the coordination between stakeholders and Member States to ensure the timely deployment of 5G networks across Europe.

DG CONNECT will prepare, for adoption by the Commission in January 2017, (i) a Communication addressing the principle of free flow of data and of emerging issue of data ownership, and (ii) a REFIT revision of the e-Privacy Directive as part of the data protection and data economy package.

Later in 2017, DG CONNECT will propose a revision of the ENISA Regulation and a revision of the Regulation establishing the ".eu" top-level domain (TLD) and the Regulation laying down public policy rules concerning the ".eu" TLD under the REFIT Programme.

Finally, DG CONNECT will present the mid-term review of the implementation of the DSM Strategy and assess the need to follow-up on, and propose new measures in relation to platforms as announced in the 2016 Communication on platforms.

The second overarching goal is to foster European ICT research, development and innovation and boost investment. Investing in ICT research and innovation is one of the main instruments for playing a prominent role at a global level and contributing to economic growth and sustainability. While DSM actions on all pillars impact on ICT Research & Innovation (R&I), at the same time the targeted R&I investments support DSM implementation. For this reason, both policy actions and R&I investment activities are included under the specific objectives to highlight their mutually supportive dimension. In other words, Horizon 2020 and CEF projects, in particular Public Private Partnerships and H2020 Focus Areas, will play an important role in supporting the policies designed and managed by DG CONNECT and, conversely, the new policies will underpin decision making regarding future R&I priorities (e.g. data economy, cyber security, industrial leadership).

"A New Boost for Jobs, Growth and Investment" is DG CONNECT's second General Objective, which is implemented through two Specific Objectives comprising a number of actions.

Almost 3 billion EUR have been earmarked, under the current Work Programme 2016-17, in the digital part of Horizon 2020. Around 40% of the budget (~1.1 billion EUR) go to major Public-Private-Partnerships (PPPs) in 5G, Big Data, Robotics, Photonics, Micro-electronics, Manufacturing technologies (Factories of the Future) and High Performance Computing. It is expected that at least 20% of the budget will go to SMEs and start-ups.

DG CONNECT will further enhance the link between funding mechanisms and the DSM. The preparation of the Horizon 2020 work programme for the period 2018 to 2020, for which DG CONNECT's share amounts to more than 6 billion EUR, will be instrumental to realise the Commission's policy objectives, in particular with regard to Digitising the European Industry and 5G. The existing PPPs, including the newly created Cybersecurity cPPP, play a strategic role and are of key importance in the support to ICT across all parts of Horizon 2020. They contribute to a better alignment of EU support to ICT R&I with industrial strategies and to a defragmentation of this support.

At the same time, the delivery of the specific outputs, detailed in this management plan, will boost the new digital technologies that are the engines of economic growth.

The position of Europe as a world leader on the digital market also largely depends on our work with international partners in three main areas: i) regulation, where we work with governments, regulators and other stakeholders to promote a regulatory system in our partner countries that is close to and/or compatible with the EU legal framework, ii) market access, where we seek to remove market access barriers in third countries and iii) coherence with our research, where we work internally and with partners to implement a coherent approach between our regulatory, policy and research initiatives (e.g. access to research programmes).

A CONNECTED DIGITAL SINGLE MARKET

SPECIFIC OBJECTIVE 1.1

Digital goods and services are available to consumers and businesses across Europe

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

SPECIFIC OBJECTIVE 1.3

The digital economy can develop to its full potential underpinned by initiatives enabling full growth of digital and data technologies

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

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 n particular democracy, freedom of expression and tolerance

DG CONNECT STRATEGIC PRIORITIES 2016-2020

A New Boost for Jobs, Growth and Investment

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

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

Relevant general objective: A Connected Digital Single Market

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

Related to spending programme Creative Europe MEDIA

DG CONNECT's objective is to reach an agreement of the co-legislators by mid-2017 to put an end to unjustified geo-blocking. Removing such discrimination and getting companies to change their current behaviour online would bring significant benefits to European consumers, such as improved access to information or wider choice.



On 14 September 2016, the Commission tabled proposals to adapt the EU copyright rules to the realities of the DSM, which will help European copyright industries to flourish in the DSM and European authors to reach new audiences, while making European works widely accessible to European citizens, also across borders. They aim to strike a good balance between copyright and other public policy objectives such as education, research, innovation and the needs of persons with disabilities. The Regulation on TV and radio transmissions and retransmissions and the directive on copyright in the DSM will, together, ensure i) better choice and access to content online and across borders, ii) improved copyright rules on research, education and inclusion of disabled people, and iii) a fairer and sustainable marketplace for creators, the creative industries and the

press. DG CONNECT will facilitate the negotiations between the co-legislators.

The Directive to facilitate access to published works for persons who are blind, visually impaired or otherwise print disabled and a related Regulation will permit the making of copies in formats that give access to works and other subject-matter to those persons, as well as the cross-border exchange of such copies within the single market and between the EU and third countries, implementing the World Intellectual Property Organisation Marrakesh treaty for people with print disabilities in EU law. DG CONNECT will facilitate the negotiations between the colegislators.

Ensuring wider access to content online across Europe is a matter of combining a wide array of policy instruments. In 2017 the support policy of the EU, embodied in the Creative Europe programme, will play its part in implementing the accompanying measures which are an integral part of the 2016 Copyright package. The structured dialogue with industry stakeholders, with Ministries of Culture and with national films funds will continue, as larger availability of content across the EU also relies on their engagement.

Finally, over the past decade, the top Level Domain (TLD) market place has undergone significant changes that provide both strategic challenges and opportunities for the ".eu" TLD. An evaluation of the two ".eu" TLD Regulations will be carried out in 2017 and will feed into their revision, with the view to update them and ensure that they remain fit-for-purpose.

Main outputs in 2017:		
All new initiatives and REFIT initiatives f	rom the Commission Worl	k Programme
Output	Indicator	Target date
Legislative proposals for a revision of Regulation (EC) 733/2002 establishing the ".eu" TLD and Regulation (EC) 874/2004 laying down public policy rules concerning the implementation and functions of the ".eu" TLD.	Adoption by the Commission.	Q4 2017 (2017/CNECT/006)
Important items from work programmes,	/ financing decisions/opera	ational programmes
Output	Indicator	Target date
Creative Europe MEDIA Work programme 2018 launching accompanying measures set out in the 2015 Copyright Communication.	Adoption by the Commission.	Q2 2017
Strategic stakeholder dialogue through the European Film Forum and national film funds on accompanying measures.	Holding 10 events in film festivals in 2017.	Q4 2017
Development of an online repository tool of subtitling through a preparatory action.	Showcase results.	Q4 2017
Other important outputs		
Output	Indicator	Target date
Regulation to prevent unjustified geo- blocking on the DSM.	Adoption by the co- legislators.	Q2 2017
Directive on copyright in the DSM.	Political agreement of co-legislators.	Q4 2017
Regulation applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes.	Political agreement of co-legislators.	Q4 2017
Directive and Regulation for the implementation of the Marrakesh Treaty.	Adoption by the co- legislators.	Q1/Q2 2017
Structured dialogue with stakeholders on licensing issues.	4 quarterly meetings.	Q4 2017
Dialogue with European animation studios aiming to agree a joint action plan to support the sector.	Adoption of the joint action plan.	Q3 2017
Interoperable system for identifying audiovisual works.	Agreement between ISAN and the Entertainment Identifier Registry Association (EIDR).	Q3 2017

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.

For the **European Electronic Communications Code and the BEREC Regulation**, DG CONNECT will support the negotiations with the co-legislators with the view to achieving a political agreement already in 2017. The new rules are expected to improve the conditions for investment in very-high-speed connectivity, contribute to the levelling of the playing field and facilitate the development of new services for business and users.



In parallel to the Telecoms Framework REFIT, the finalisation of the legislative process on the review of the **functioning of the wholesale roaming** will contribute to the final realisation of an EU wireless market without roaming surcharges on periodic travel. In addition, the rules on fair use and sustainability, as developed by the Commission, will ensure that subscribers get a fair deal and that operators can take measures against abuses of the Roam-like-athome regime. Both are further important enablers for its introduction in June 2017.

Following the review of the 2009 Commission Recommendation on the regulatory treatment of **fixed and mobile termination rates** in the EU, DG CONNECT will prepare a legislative proposal to render

the principles of the Recommendation binding to ensure that these rates are calculated in all Member States on the basis of a harmonised methodology, which will also facilitate the abolition of international roaming surcharges (2017/CNECT/012).

DG CONNECT has prepared a REFIT revision of the **e-Privacy Directive** as part of the Commission's data protection and data economy package, which is scheduled for adoption by the Commission in January 2017.

The 2016 Communication on **Online Platforms** committed the Commission to a number of specific follow-up actions, in particular a) an investigation into potentially unfair business-tobusiness (B2B) trading practices of online platforms which may cause specific and identifiable harm to innovation or to the wider European economy and b) an examination of the need for guidance on the liability of online platforms to encourage and support voluntary measures adopted by online intermediaries to fight against illegal online content (2017/CNECT/008).

Cyber-security is fundamental to the effective functioning of the DSM. We need to ensure that citizens and businesses have trust in the security of our networks and therefore create an adequate layer of trust and security at the base upon which further develop a fully-fledged digital economy. The adoption of the Directive on network and information security (NIS Directive) provides for a Cooperation Network at EU level building an EU-wide community that will work together, at strategic level and at operational level, to face common cyber threats. In 2017, DG CONNECT will prepare, for adoption by the Commission, implementing acts a) laying

down procedural arrangements for the functioning of the Cooperation Group (for which DG CONNECT will provide the secretariat) and b) related to the security and notification requirements for digital service providers.

Finally, DG CONNECT will **evaluate Directive 96/9 on the legal protection of databases (REFIT)** (2017/CNECT/004) to i) assess whether the Directive still fulfils its policy goals of providing protection of databases and ii) determine whether it is still adapted in view of the developments of new technologies and business models and the growing importance of data in today's economy.

Main outputs in 2017:				
All new initiatives and REFIT initiativ	All new initiatives and REFIT initiatives from the Commission Work Programme			
Output	Indicator	Target date		
Legislative proposal on the review of the ePrivacy Directive (REFIT).	Adoption by the Commission.	Q1 2017 (2016/CNECT/007), (2016/CNECT/013)		
Important items from work program	mes/financing decisio	ns/operational programmes		
Output	Indicator	Target date		
Other important outputs				
Output	Indicator	Target date		
Review of the Commission Recommendation on fixed and mobile termination rates in the EU.	Adoption by the Commission.	Q4 2017 (2017/CNECT/001)		
Legislative proposals for a European Electronic Communications Code and a new BEREC Regulation.	Political agreement of the co-legislator.	Q4 2017		
Review of the functioning of the wholesale roaming market.	Political agreement of the co-legislators.	Q1 2017		
Review of the Audiovisual Media Services Directive.	Adoption by the co- legislators.	Q3/Q4 2017		

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 programmes Horizon 2020, CEF

For the **mid-term review of the implementation of the DSM Strategy**, DG CONNECT will examine the progress made towards completing the DSM and identify where further efforts are needed by the co-legislators and any necessary further proposals. The communication will include the European Digital Progress Report, which provides an overview of Member States' progress in digitisation.

The **High Performance Computing** (HPC) initiative was launched as part of the Digitising European Industry strategy in April 2016. It aims to create a world-class European HPC and Big Data ecosystem by 2023 built on two exascale computing machines, which would rank in the first 3 places of the world. The HPC initiative is being implemented through two main tracks:

- DG CONNECT works towards federating the main investments done in Europe on supercomputing facilities for science and engineering. The approach builds on the already existing cooperation, in the PRACE initiative, between the key investors in these infrastructures. A multi-government organisation (EuroHPC) should bring together these Member States to define and procure the exascale systems.
- Four Member States (LU, IT, FR, ES) intend to set up an Important Project of Common European Interest (IPCEI) focusing on building a commercial activity around HPC and Big Data Applications, complementing the effort done in the EuroHPC. The pre-notification of this IPCEI to the Commission should take place in early 2017.

DG CONNECT will prepare, for adoption by the Commission, a Communication on **free flow of data** (localisation) and on emerging issues of access to and ownership of data, liability, and



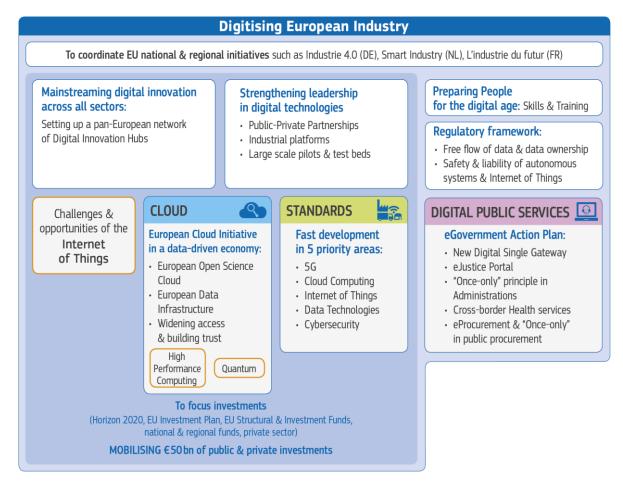
portability. It may be followed by a legislative initiative in 2017 providing legal clarity on these emerging issues.

Regulation No 526/2013 requires the Commission to conduct an evaluation of the **European Union Agency for Network and Information Security (ENISA)** by June 2018 and a possible revision of the mandate, which expires in 2020. Due to the rapid evolution of the EU cybersecurity landscape, including the NIS Directive, the Commission has anticipated the evaluation of the Agency with a view to present a proposal for a new mandate by the end of 2017.

DG CONNECT will work on an initiative on **trust and security in the**

European data economy (PLAN/2016/162), aiming to establishing a European framework that ensures cyber-secure design and testing, labelling and security certification of ICT products, services and complex systems – encompassing IoT and autonomous systems. DG CONNECT will also explore options for developing an industry-led trusted IoT label.

In 2017, the 2016 **Digitising European Industry (DEI) strategy** moves from planning to execution. The governance framework for the DEI will be put in place with roundtables, stakeholder fora and specific mission-oriented working groups; and the European Platform of National Initiatives gathering all relevant Member States initiatives will be launched. The LEIT-ICT part of the H2020 Work Programme 2018-20 will devote substantial financial resources for the implementation of the strategy and will in particular focus on digital innovation hubs and digital industrial platforms foreseen in the strategy.



DG CONNECT will explore **financing options of European Digital Projects of Common Interest**, in particular for the DEI measures (such as HPC, Connected and Automated Driving, cybersecurity, digitising healthcare, digital skills), with the aim to define a framework to support the development of pan-European digital infrastructures allowing the blending of different EU financing sources (from H2020 to CEF, ESIF and EFSI) with national and private funding, building on new instruments such as trust funds.

An emerging key priority is the **Next Generation Internet**, which was launched as a new future flagship initiative in 2016 and which will take a fresh look at resolving the concerns of citizens and businesses, notably around security and privacy but also in the ever-increasing centralisation of power within a few actors. The Internet should offer more to people and to our society, providing better services and greater involvement and participation and should be designed for humans, so that it can meet its full potential for society and economy and reflect the social and ethical values that we enjoy in our societies. 2017 will be the year to put this long-term initiative into motion by creating a broad community and a European ecosystem of relevant actors. Based on a broad consultation, the Commission will prepare for a long-term RTD&I programme for Europe to regain a stronger position on the technologies the Internet will run on in 10 years (e.g. blockchains, virtual reality, artificial intelligence, language learning technologies).

To seize the opportunities related to **artificial intelligence**, DG CONNECT plans to implement, in the LEIT-ICT part of the H2020 Work Programme 2018-20, the concept of a platform for artificial intelligence which feeds directly to the Next Generation Internet.

In the **Internet of Things (IoT)** cross-cutting domain, 5 large scale pilots (including smart living environments for ageing well, smart farming and food security, wearables for smart ecosystems, reference zones in EU cities and autonomous vehicles in a connected environment) plus a horizontal support action will involve all value-chain actors and ensure the longer-term evolution of the IoT. These pilots are also connected to the Alliance for Internet of Things Innovation (AIOTI), the DSM (link to hubs, platforms, skills, regulation) and the IoT-European Platforms Initiative. By the end of 2017, this work should validate emerging standards frameworks and testing of innovative business models through the implementation and usage of IoT technology.

Smart mobility action will focus on **Connected and Automated Driving (CAD)** and more specifically on integration with the developments that are essential for the future of the sector such as 5G, IoT and the data economy. The main policy vehicle is the Round Table on CAD and its deriving initiatives: the CAD industry-led project of the European Alliance between Telecom and Automotive and the 5G testbed deployed by Member States with the support of the Commission to foster and scale-up the work done by the Alliance. DG CONNECT will closely collaborate with DG GROW, DG MOVE, DG RTD and DG JUST as well as public and private stakeholders. As part of the implementation of the 2014 Communication on building a European data economy, DG CONNECT will investigate what to do about liability questions related to autonomous systems.

In line with the 2016 eGovernment Action Plan 2016-2020, DG CONNECT will integrate in the H2020 Societal Challenges Work Programme 2018-20 pilots for new and better public services aiming to foster **Open Government** (transparency, eParticipation, collaborative production of services, etc.), including the use of emerging technologies and SME actions (mobile eGov apps). The on-going large scale pilot with Member States will develop and validate the application at the EU level of the once only principle for business.

In the context of the review of the **Reuse of Public Sector Information Directive** scheduled for 2018, and a possible proposal for amendments, DG CONNECT will collect Member States reporting on its transposition, addressing in particular availability of public sector information for re-use, availability conditions and redress practices. Facilitated and harmonised access to European public information will continue to be supported by the Digital Service Infrastructure on Public Open Data under the CEF telecom programme.

In line with the 2016 Communication on **ICT Standardisation Priorities for the DSM**, the Commission (DG GROW, DG CONNECT) will work in collaboration with stakeholders including European standardisation organisations, the European Patent Office, industry and research, on the identification, by 2017, of possible measures to (i) improve accessibility and reliability of information on patent scope, including measures to increase the transparency and quality of standard essential patent declarations as well as (ii) to clarify core elements of an equitable, effective and enforceable licensing methodology and (iii) to facilitate the efficient and balanced settlement of disputes.

To enable all Europeans to reap the full benefits of digital technology, whether they are consumers or in the workplace, they need to have the right level of **digital skills**. The Commission will address solutions and actions to boost digital skills through the Digital Skills and Jobs Coalition launched on 1 December 2016, in close collaboration with Member States and stakeholders. It will also pilot the use of digital technology for better skills anticipation and training, and a voucher scheme to promote cross-border internships in the digital domain.

Main outputs 2017:			
All new initiatives and REFIT initiatives from the Commission Work Programme			
Output	Indicator	Target date	
DSM mid-term review.	Adoption by the Commission.	Q2 2017 (2017/CNECT+/003)	
Evaluation and review of the ENISA (European Union Agency for Network and Information Security) Regulation (REFIT).	Adoption by the Commission.	Q3 2017 (2017/CNECT/002) Q4 2017 2017/CNECT/005)	
Important items from work program	mes/financing decisions/opera	ational programmes	
Output	Indicator	Target	
Integration and consolidation of the largest eInfrastructure services establishing the backbone of the European Science Cloud.	Launch of at least 1 integrated eInfrastructure project.	Q4 2017	
Implementation of the High- Performance Computing (HPC) strategy: - pan-European HPC infrastructure and services (PRACE). - setting up the EuroHPC, a multi- government organisation responsible for the acquisition and operation of pre-exascale and exascale HPC systems. - supporting the set-up of an IPCEI on HPC and Big Data Applications addressing the build-up of a commercial activity around HPC and big data.	 Signature of grant. Signature of a joint statement by at least 4 Member States to set up EuroHPC. Support IPCEI players to pre-notify DG COMP on the IPCEI by Q2 2017. 	Q1 2017	
Other important outputs		1	
Output	Indicator	Target	
Setting up and implementing the governance framework for the Digitising European Industry (DEI) strategy.	 Launch of the European Platforms of national initiatives on digitising industry. Reaching out to 500+ stakeholders in a European Stakeholder Forum on DEI. 	Q1 2017	
Communication on emerging issues of access to and ownership of data,	Adoption by the Commission.	Q1 2017 (2016/CNECT+/001)	

liability, and portability and on the free flow of data within the EU.		
Cross-border pre-deployment project from industry on Connected and Automated Driving covering regulatory and deployment aspects and based on 5G evolution.	Project launched.	Q2 2017
Connected Automated Driving: framework agreements with Member States on a) cross-border regulatory issues concerning field tests (focus on digital aspects) and b) data issues such as ownership, access, storage.	Agreement reached between Member States concerned by a testing corridor.	Q4 2017
Better Digital Skills for all Europeans, accompanied by H2020 support.	Launch of the New Digital Skills and Jobs Coalition and a pilot voucher scheme for digital internships.	Q3 2017

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 programme(s): CEF/EFSI/ESIF

The full economic and social benefits of the ongoing digital transformation will only be achieved if Europe can ensure widespread deployment and take-up of very high capacity networks in



urban and rural areas, and across all of society. The Commission's 2016 Communication **Connectivity for a Competitive Digital Single Market – Towards a European Gigabit Society** includes a set of strategic connectivity objectives for 2025 the Commission proposes for endorsement by the European Parliament and the Council. Under this package, DG CONNECT is also working with the co-legislators for the adoption of the Regulation to support local communities in providing free public Wi-Fi to their citizens – the "WiFi4EU initiative" – with the objective to reach a political agreement in the first half of 2017 and to then launch a first call.

Financing of broadband constitutes a key issue. To support Member States and regions with regard to the ESIF in the area of broadband, DG CONNECT is actively working with DG REGIO, DG AGRI and representatives of national and regional authorities in the framework of the **Broadband Competence Offices' network**, set up in 2016. The **Broadband Participatory Platform**, co-managed by the Committee of the Regions and DG CONNECT, aims at helping regions in the management of European public funding and will start its activities in 2017. DG CONNECT is also working with DG ECFIN on the implementation of the Investment Plan supported by the EFSI. The DG is actively contributing to setting up a broadband fund, which will be backed by 100 million EUR - the **Connecting Europe Broadband Fund**, which will be backed by 100 million EUR from the CEF budget for broadband. The DG also provides technical assistance with the World Bank to local project promoters within the **Connected Communities Initiative** and continuously reviews national and regional broadband plans and relevant state aid schemes.

Regarding the **UHF Decision** on access to the 700 MHz band for wireless broadband and safeguards for audiovisual as well as downlink flexibility below 700 MHz, negotiations with the EP and Council will continue in 2017, with the aim of coming to an agreement after first reading. Depending on a positive outcome of the UHF Decision, a mandate to the European Conference on Postal and Telecommunications concerning the band 470-694 MHz will be launched to clarify the concept of flexibility for introducing wireless broadband at national level, while safeguarding and giving priority to broadcasting needs in this band.

DG CONNECT is working with Member States and other stakeholders to increase coherence and compatibility on all sources of data concerning the **mapping of the provision and quality of services of connectivity networks**.



The DSM strategy and the 2016 Communication on Connectivity for a Competitive DSM both underline the importance of very high capacity networks like 5G as a key asset for Europe to compete in the global market. The **5G Action Plan** aims to foster the adequate deployment coordination, to build momentum for investment in 5G networks and to create new innovative ecosystems, thus enhancing European competitiveness and delivering concrete benefits to society. The implementation of the actions will start in 2017 to enable the launch of fully commercial 5G services in 2020. The deployment of Connected and Automated Driving will be one of the flagship applications for 5G. The successful implementation of the 5G Action Plan in 2017 and beyond will rely on the Member States' efforts in relation to the main actions of the 5G action plan.

Digital services are key elements of a functioning DSM. CEF deploys solid trans-EU interoperable operational services based on mature technical and organisational solutions, as identified by the CEF Regulation: 15 digital service infrastructures (DSIs) which are ready to be deployed and will be sustainable and maintained over time. The DSIs for which funding is foreseen in 2017 are Europeana, eldentification and eSignature, eDelivery, eInvoicing, Public Open Data, Automated Translation, Cybersecurity, eProcurement, European Platform for the interconnection of European Business Registers (BRIS), eHealth, Electronic Exchange of Social Security Information (EESSI) and the European eJustice portal. The CEF Work Programme 2017 should also include the priorities and activities to be launched for the WiFi4EU initiative (subject to its adoption by the co-legislators in 2017). Finally, initial support will be given to the exploitation of synergies between the Public Open Data DSI and HPC for cross-border use cases processing open public information datasets through supercomputers. This initial investment is as first step towards a full coordination of effort between different programmes such as CEF or H2020, but also involving Member States in the development and federation of a large scale European HPC and Big Data service infrastructure facility serving a wide range of different stakeholders. Therefore new, larger scale activities are expected to be included in future CEF Work Programmes. Work on the mid-term evaluation of CEF started in September 2016 and will be finalised in 2017.

Main outputs in 2017:				
All new initiatives and REFIT initiatives from the Commission Work Programme				
Output	Indicator	Target date		
Important items from work	programmes/financing decision	ons/operational programmes		
Output	Indicator	Target date		
CEF Broadband fund.	Raising at least 100 million EUR of funds from market investors in addition to EU/EIB funds. Finance first 3 projects.	End 2017		
WiFi4EU voucher scheme for local authorities	- Reaching political agreement between co-legislators. - First call (20 million EUR).	Q2 2017 Q3		
Other important outputs				
Output	Indicator	Target		
Decision on the use of the 470-790 MHz frequency band in the EU (UHF Decision).	Adoption by the co-legislator.	Q1 2017		
Implementation of the 5G Action Plan a) advanced pre-commercial trials b) 5G Connectivity Group composed of Member States and EC.	 a) Presentation at the Mobile World Congress of the EU industry roadmap for pre- commercial 5G trials. b) Start of the Connectivity/5G Group. 	a) Q1 2017 b) Q2 2017		

CEF Telecom Work Programme 2017 financing projects of common interest in the form of Digital Service Infrastructures.	Adoption of the CEF Telecom Work Programme.	Q1 2017
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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 programmes Horizon 2020, Multimedia Actions, Creative Europe MEDIA

Europe must help the **digital transformation of its creative and media sectors** with more cross-border and globally successful creative content, and more projects and services bringing digital innovation, to answer the needs of the new audiences and business opportunities across Europe. Creativity and critical thinking - in addition to scientific and technological skills - are needed for this to happen. DG CONNECT will work on a coherent strategy to diffuse and facilitate creativity and support the cultural and creative industries along their whole value chain.

A healthy, plural, free and innovative media system is crucial for the development of democratic societies. Among other actions aimed at strengthening **media freedom and pluralism** across Europe and raising awareness on these topics, the Commission will continue to fund – with the support of the European Parliament – pilot projects and preparatory actions in the field of media pluralism and media freedom.

DG CONNECT will support policies and activities related to **media literacy** in Member States and by professional and civil society stakeholders in several ways: through the annual meeting of the Expert Group on Media Literacy, its periodical eNews and its Twitter account @EU_MedLit, through creating partnership with external partners and co-financing conferences and through the implementation of Pilot Project(s) on "Media Literacy for all".



The objectives of the **Creative Europe MEDIA** subprogramme are twofold: safeguarding cultural diversity, and strengthening the competitiveness of the European audiovisual industry, including cinema, content for TV, and video games. MEDIA co-finances around 2000 European projects per year, including some of the jewels of European cinema and can encourage citizens to engage with culturally diverse films from across Europe.

European Media innovation will be supported by the Commission's media policy, as well as by H2O2O research innovation actions which leverage on the potential enabled by the **convergence and integration** between traditional Media (e.g. broadcasters, news providers), Internet-based services and Social Media. Such actions will develop new tools and services, based on advanced ICT technologies that will empower more immersive, interactive and personalised ways to consume media content.

The role of **Social Media** is now fundamental in our society and democracy and a main driver for media consumption and business opportunities. As Social Media are the future way our societies will operate for communication, exchange, business, learning and knowledge, particular attention will be given to them by the Commission in the H2020 Work Programme 2018-20 (LEIT ICT).

Europeana should become the catalyst for solutions enabling cross-border access and (re)use of cultural content, through innovation and creative exploitation. In May 2016, the Council adopted Conclusions on the role of Europeana for the digital access, visibility and use of European cultural heritage, which underline Europeana's relevance both from a cultural and a digital innovation perspective and invite the Commission to present "*an independent evaluation of Europeana and give clear orientations for its mid- and long-term development by assessing alternatives at the EU level for the future scope, sustainable funding and governance*". The evaluation should inform modalities for future strategy and funding. In addition, the funding method for the Europeana DSI under the CEF will switch to a combination of procurement covering the core service platform to ensure stability and interoperability and grants for related user-oriented projects (CEF generic services) which Member States can co-fund. The overall objective of **multimedia actions** is to strengthen independent reporting on EU issues from a European point of view. Television continues to be the most popular medium and **support to European** focus delivered on a multi-lingual basis. Support to radio services networks would also

provide an important contribution to an informed and objective debate on European affairs.

The 2016 **Web Accessibility Directive** aims at making the websites and mobile apps of public sector bodies more accessible for people with disabilities. In 2017, DG CONNECT will prepare an implementing decision mandating the European standardisation organisations to work on harmonised standards to support the implementation of the common accessibility requirements set out in the Directive.

Main outputs in 2017:	Main outputs in 2017:			
All new initiatives and REFIT initiatives from the Commission Work Programme				
Output	Indicator	Target date		
Important items from work program	mes/financing decisions,	operational programmes		
Output	Indicator	Target date		
Facilitating a European Centre for Press and Media Freedom.	Launch of the preparatory action.	Q2 2017		
Creative Europe MEDIA Work programme 2018.	Adoption by the Commission.	Q2 2017		
Frontloading of Creative Sectors Guarantee Facility from EFSI.	Agreement with ECFIN and EIF.	Q1 2017		
Other important outputs				
Output	Indicator	Target date		
Media Pluralism Monitor.	Launch of the preparatory action.	Q1 2017		
Enhancing awareness among relevant stakeholders on EU policy in the field of media freedom and pluralism.	Launch of the contract with the European University Institute.	Q1 2017		
Roadmap for European future media and social media for 2021-2027.	Endorsement of the roadmap in the New European Media summit.	Q4 2017		
Strengthening Europeana (CEF DSI)	Independent evaluation of Europeana and new funding method.	Q4 2017 (PLAN/2016/55)		

Relevant general objective: A New Boost for Jobs, Growth and Investment

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 Horizon 2020



StartupEurope is the policy initiative supporting start-ups in Europe. The ecosystem is evolving rapidly in terms of expertise, talented teams, funding and closer links with investors and big firms. Significant progress has already been achieved on connecting different local ecosystems and on developing a one-stop-shop for start-ups in Europe (Startup Europe Club), which provides valuable information on funding and

networking opportunities. Activities will be reinforced, in particular to connect local tech ecosystems, create networks of regional players, build bridges between corporates, investors and start-ups, and foster EU wide networks of stakeholders support start-ups to soft land in new markets. In line with the 2016 Start-ups and Scale-ups Communication, Startup Europe will be scaled up to act as a coordination umbrella of existing and future EU initiatives towards strengthening startups ecosystems.



In the area of eHealth and ageing, the objective is to design and implement a comprehensive "health 4.0" approach to leverage digital technologies and data to achieve greater prevention and citizen empowerment, personalised treatment, and integrated and outcome-based care. This will imply linking more closely: (1) H2020 research and innovation efforts in

the area of health and care (beyond societal challenge 1); (2) deployment activities, notably to follow up on the DEI initiative (including the European Cloud Initiative, and various PPPs on technologies with health applications) and on the eHealth Action Plan / mHealth Green Paper (including actions on mHealth apps privacy and validity of apps data); (3) enabling rules, with particular attention to the proposal on the data economy / free flow of data; (4) stakeholders engagement frameworks, notably the European Innovation Partnership on Active and Healthy Ageing (mainly regional actors), the eHealth Network under the cross-border care Directive (Member States) and the eHealth stakeholders group. Moreover, a mid-term evaluation on the

eHealth Action Plan will be undertaken in 2017, including a public consultation, to assess the Plan's performance and fitness for the challenges ahead. This will be closely linked to the Commission follow-up on the "Blueprint on digital transformation of Health and Care", which a group of stakeholders delivered at the end of 2016.

Smart Cities are core elements in achieving Europe 2020 goals related to smart, sustainable und inclusive growth. The European Innovation Partnership (EIP) on Smart Cities and Communities speeds up the creation of a market for smart city solutions by integrating technologies across the ICT, mobility and energy sectors. Stronger relations should be forged with the partnerships on urban challenges under the EU Urban Agenda, in particular with its digital actions. There is also a need to scale up from digital integration of urban infrastructures to digital transformation of the city (Cities 4.0).



Main outputs in 2017:			
All new initiatives and REFIT initiatives from the Commission Work Programme			
Output	Indicator	Target date	
Important items from work pro	ogrammes/financing dec	cisions/operational programmes	
Output	Indicator	Target	
Reinforcement of the Startup Europe initiative: - Startup Europe Club, the one- stop-shop for startups, - Startup Europe to become the umbrella initiative coordinating EU initiatives related to startups ecosystems, - Launch of pilot projects connecting people and ideas across startup ecosystems.	Number of nodes (ecosystems, clusters and digital innovation hubs) participating.	50 nodes from Europe and abroad.	
Adoption of the H2020 Work Programme 2018-20 including Societal Challenges (budget: 873 million EUR).	Adoption by the Commission.	Q4 2017	

Part 1. Main outputs for the year

Launch of pilot projects to identify the most promising H2020 innovation and help researchers to turn their innovation into successful businesses.	Launch of pilot projects (innovation radar).	Q4 2017
Other important outputs		
Output	Indicator	Target
Staff Working Document (SWD) on the Intermediate evaluation of the eHealth Action Plan.	Adoption of the SWD.	Q3 2017
Standardisation initiatives, notably through the European Telecommunications Standards Institute on the basis of the European Smart Cities Framework.	2-3 standardisation initiatives.	Q4 2017
Establishment of a High Level Group on Smart Cities.	Group established.	Q2 2017
H2020 to be a centre of	Percentage of H2020	
innovation for young companies	ICT budget dedicated	50% of work programme by Q4
and dynamic SMEs in pursuit of	to innovation activities	2017.
excellence.	(base line 2014: 45%).	

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

This specific objective aims to ensure that research and innovation investment funds new breakthrough technologies and very-large scale flagship research initiatives.

DG CONNECT will prepare the ICT parts of the **Horizon 2020 Work Programme 2018-20** for the strands under its responsibility. H2020 involves a very significant budget with around 6.3 billion EUR managed by DG CNECT across the three pillars and constitutes an essential vehicle for the implementation of the DEI Strategy. Outputs for 2017 will include the adoption of the Work Programme 2018-20 and new research grant agreements in key emerging domains and project deliverables from initiatives started in the past. The first calls under the new Work Programme will be launched still in 2017.

Work on the H2020 Interim Evaluation led by DG RTD has started in 2016. Milestones include

the establishment of a Staff Working Document scheduled for Q2 2017 and a Commission Communication on the interim evaluation in Q4 2017. Reviews of the FET Flagships, the contractual PPPs, of the ECSEL Joint Undertaking and the eInfrastructures will feed into the process.

PPPs play a strategic role and are of key importance in the support to ICT across all parts of H2020. In total, **seven PPPs** are now supported entirely or partly through LEIT-ICT: **5G**, **Photonics, Robotics, Big Data, Factories of the Future, HPC and Cybersecurity**. As part of the implementation mechanism of the DEI strategy, PPPs are expected to play a reinforced role in 2018-20 and become real aggregation frameworks and ecosystems for digital industrial innovations. The Cybersecurity contractual PPP, signed in 2016, is a key action to create the right conditions for digital networks and services to flourish and will launch its first calls in 2017. In addition to the Contractual PPPs, DG CONNECT will continue to finance the **Electronic Components and Systems for European Leadership** (**ECSEL**) **Joint Undertaking**, for which 565 mio EUR are earmarked for the period 2018-20.

The **two Future and Emerging Technologies (FET) Flagships**, the Graphene Flagship and the Human Brain Project (HBP), have successfully completed their initial ramp-up phase. Both Flagships will submit their plans for the third phase expected to start in 2018, which should support progress of HBP towards achieving its core objective of building and demonstrating an integrated and federated research infrastructure for neuroscience, brain medicine and future computing and the Graphene Flagship in maturing technology readiness levels of promising graphene enabled technologies, with a view toward their exploitation.

Building on a broad consultation **on new flagships** conducted in 2016, a number of preparatory actions for new flagships are expected to be part of the H2020 FET Work Programme 2018-20 to be adopted in 2017.

In line with the Communication on European Cloud Initiative, the **Commission Expert Group on the Quantum Technology Flagship** should provide, by mid-2017, recommendations to the Commission on a Strategic Research Agenda for the new Flagship, as well as on governance and implementation aspects. The ramp-up phase of Quantum Technologies Flagship will be part of the H2020 Work Programme 2018-20.

The notifications of Member States to engage in the **Important Projects of Common European Interest on micro- and nano-electronics** have been submitted in late 2016, and the projects are now moving to the implementation phase which will be facilitated by the DG.

Main outputs in 2017:				
All new initiatives and REFIT initiatives from the Commission Work Programme				
Output	Indicator	Target date		
Important items from work programmes	/financing decisions	operational programmes		
Output	Indicator	Target date		
H2O2O – Future and Emerging Technologies (FET) Proactive – High Performance Computing calls.	Timely launch of 2 calls (44 mio EUR).	Q2 2017		
Adoption of the H2O2O Work Programme 2018-20 - Excellent Science (FET: 1457 mio EUR, e- infrastructures 405 mio EUR), - Industrial Leadership (LEIT ICT 2778 mio EUR, LEIT ICT / ECSEL: 565 mio EUR), - Cross-cutting activities.	Adoption by the Commission.	Q4 2017		
Cybersecurity cPPP.	3 calls for proposals.	Q3 2017		
Other important outputs				
Output	Indicator	Target date		
FET-Flagships: the Graphene Flagship and the Human Brain Project.	Proposals for the third phase of the Flagships <u>.</u>	Q2 2017		
Ambient Assisted Living Joint Programme Initiative to support the transition of "Innovation to Market" in the field of Active and Healthy Ageing.	Adoption of annual work programme 2018.	Q4 2017		

A. Human Resources management



DG CONNECT is fully aware of the efforts still needed in terms of first appointments of women and is actively engaged to meet the target by 2019. In particular, DG CONNECT gives pre-management opportunities to talented AD-women and supports talented AD-women in their career aspirations. This includes the recently concluded Women Development

Programme with a 360 degree development component.

As far as staff engagement is concerned, the outcome of the 2016 Staff Survey reflects a relatively stable DG CONNECT employee engagement score (60% vs. 61% in previous survey). The DG CONNECT main trends mirror the ones at Commission level. The lowest scoring questions relate to the allocation of human resources (in a context of resources constraints) and the career development opportunities. DG CONNECT is in the process of defining an action plan. In addition, DG CONNECT is defining its Learning and Development priorities which will help to ensure that people are properly equipped to deliver on political and operational priorities and for career development.

As regards well-being, the outcome of the 2016 Staff Survey reflects an overall improvement of DG CONNECT score and hence a recognition of DG CONNECT's efforts in follow-up of the previous survey.

The key challenge of DG CONNECT will be to make the best use of our (decreasing) available talents to deliver on our political and operational priorities, taking into account the current resources constraints. This entails ensuring that DG CONNECT

- meets its taxation requirements towards central services;
- reduces its support levels in accordance with the targets agreed with central services;
- increases its presence in Luxembourg in accordance with the targets agreed with central services;
- is equipped with engaged staff for delivering on its priorities.

The HR Modernisation project implemented according to the Communication on Synergies and Efficiencies of April 2016 makes changes to the way that HR services are delivered. HR services will be delivered by an Account Management Centre (AMC) inside DG HR. Each DG will have an HR Business Correspondent, responsible for defining HR strategy and taking HR decisions, in consultation with the management of the DG, as well as ensuring that the DG gets the HR service it needs, in cooperation with the AMC. DG CONNECT will move to the new way of working in 2017 and will be supported by AMC3, located in Beaulieu, which will also serve DG CLIMA, DG ENV and DG REGIO.

Definition of HR strategy and priority actions to make progress towards the Strategic Plan targets are the responsibility of the HR Business Correspondent and will continue to be addressed in the DG's Management Plan and Annual Activity Report.

Objective 1): 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. **Main outputs in 2017:**

Output	Indicator	Target
Follow-up on the Women Development programme which included 360 degree feedback + coaching sessions, planned actions for 2017: close monitoring of all females in pre-management positions, reviving the women in pre-management network, feedback by Director of Resources to female candidates who were not selected for HoU posts, training for interview preparation.	Number of female applicants in pre/middle- management selection procedures.	At least 1.
Close monitoring and management of job quotas / budget and careful assessment of replacements for every departure, in light of the operational and political priorities.	Taxation targets met within the deadlines set by the budgetary authority.	Staff reduction laid down in the 2017 allocation of establishment plan posts (-4%) and the appropriations for external personnel.
Learning & Development Strategy tailored to the skills/ competences/ knowledge required for the completion of our operational and political priorities.	L&D priorities to be adopted as part of the overall HR strategy for the DG.	Complete curriculum reflecting newly identified requirements.
Reduction of support functions to focus resources on operational activities.	Reduction of FTEs in support functions under scrutiny by DG HR.	FTE reduction in support functions in accordance with targets (-35) agreed with central services.
Increase of DG CONNECT presence in Luxembourg within the Digital Pole.	Increase of FTEs in Luxembourg.	FTE increase in accordance with targets (+20) agreed with central services.
Develop and monitor the implementation of the DG action plan as a follow-up to the 2016 Commission staff satisfaction survey. This action plan will be finalised for the end of Q1 2017, taking into account not only the outcome of the 2016 staff	Staff Engagement Index within the 2017 Commission staff satisfaction survey.	Staff Engagement Index of 65.

Part 2. Main organisational management outputs for the year

survey but also the outcome of units'		
discussions within the context of the		
Diversity and Inclusion Days and the		
outcome of the reflection steered by DG		
CONNECT AST network on how to adapt		
our working methods and culture within		
the context of reduced resources and		
support levels.		
Well-being activities organised at DG CONNECT within the context of the Fit@Work Programme.	Number of well- being activities organised within DG CONNECT.	 2 series of well-being trainings per year, 3 blood donation sessions, weekly well-being activities, ad hoc workshops to build resilience depending on staff needs (based on staff survey and unit discussions).

B. Financial Management: Internal control and Risk Management

In 2017, the major part of DG CONNECT's expenditure is related to H2020 and FP7 grants. Ex-ante controls are rigorously implemented for each transaction (commitments and payments), but the internal control system is designed to gain assurance mainly from expost audits. The Common Audit Service (CAS) of the Common Support Centre (CSC) coordinates the ex-post audits for the research family members for FP7 and H2020 and the CIP legacy audits for DG CONNECT. A few FP7 and CIP legacy audits are coordinated directly by DG CONNECT. Together with the audit implementation measures, the ex-post audits clean the budget from errors and prevent them from happening again in the future. The DGs make continuously huge efforts on training and informing beneficiaries about the rules (Coordinators' Day, Participants' Portal, communication campaigns).

Beside the results of these control efforts expressed in terms of Error Rate, the control output of DG CONNECT must also meet other legal requirements of the Financial Regulation: time-to-grant, time-to-inform and time-to-pay are major performance indicators. Respecting them also contributes to the regularity of the operations.



Fraudulent cost claims in research grant agreements is the main sectorial fraud risk. The Fraud and Irregularities in Research Committee is the main platform of coordination between the research family members in the field of anti-fraud. Its action is complemented by the local anti-fraud correspondents

working meetings and a common anti-fraud training and common tools (guidance, IT developments) – as detailed in the action plan of the Research Anti-fraud Strategy (RAFS).

The Committee monitors the state of play of this action plan.

The main fraud prevention measure lies in raising the fraud awareness amongst a target population (agents involved in public procurement and direct grant management). The anti-fraud training course focussing on grants is in place since 2011 and has been revamped in 2015. One of the main outputs of the fraud detection work consists in files referred to OLAF, which are, together with other OLAF cases relevant for DG CONNECT, regularly monitored and reported to the management and to the Commissioner. The CAS, which conducts FP7/H2020 audits, including fraud risk audits, is also responsible for transmitting information to OLAF about alleged fraud cases brought to light by financial audits.

The 2016 DG CONNECT anti-fraud strategy, communicated to all staff, focusses on the areas of activity not covered by the RAFS. The implementation of its action plan will be monitored on a regular basis.

Objective 1): Effective and reliable internal control system giving the necessary guarantees concerning <u>the legality and the regularity</u> of the underlying transactions **Main outputs in 2017:**

Output	Indicator	Target	
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Ex ante controls	Coverage High risk transactions	100% (approx. 320	
	coverage high hisk transactions	transactions)	
Ex-post audit plans	Implementation of the 2017	95% at 31/12/2017	
	audit plan	55 % at 51/12/2017	
Implementation of the	Cumulative implementation rate	85% at 31/12/2017	
audit results.	of FP7 audit results	65% at 51/12/2017	
Implementation of	Cumulative implementation rate	75% at 31/12/2017	
extrapolations.	of FP7 audit results	75% at 51/12/2017	
Open recommendations	Number of critical		
from European Court of	recommendations from ECA	None	
·	overdue for more than 6	None	
Auditors (ECA)	months		
		6000 for the research	
Trainings on business processes (H2020).	Number of participants.	family by Q4 2017	
		including web streaming.	
		Training organised by the	
		Common Support Centre	
		(CSC).	
L	I		

Objective 2): Effective and reliable internal control system in line with sound financial management.

Main outputs in 2017:

Output	Indicator	Target
timely execution of payments	Percentage of payments on the administrative budget made within the time limits	>95%
Timely execution of	Time_to_pay	95% compliant by
payments	Time-to-pay	31/12/2017
Timely information to	Time-to-inform	95% compliant by
the participants		31/12/2017
Efficient grant	Time-to-grant	95% compliant 31/12/2017
management process		55% compliant 51/12/2017

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.

Main outputs in 2017:

Output	Indicator	Target
Implementation of the	% of implementation of actions	
anti-fraud strategies	planned for 2017 in the anti-	100%
(RAFS, DG CONNECT)	fraud strategies	
Fraud And Irregularities	Number of meetings	2 by 31/12/2017
in Research Committee	Number of meetings	2 09 51/12/2017
Anti-fraud awareness		
raising trainings		
(Recurrent training	Number of participants from DG	30 in 2017
courses on	CONNECT	50 11 2017
grants/procurement		
targeting specific users)		
Staff survey on fraud	Level of awareness of DG	60% correct replies to the
awareness	CNECT staff	questions of the survey.

C. Better Regulation

The main planned outputs linked to the Better Regulation objective in the Strategic Plan are listed in Part 1 under the relevant specific objective. They are presented in the tables under the headings "All new initiatives and REFIT initiatives from the Commission Work Programme" and "Other important items".

D. Information management aspects

The Commission adopted a new corporate strategy for data, knowledge and information management in October 2016. The new strategy establishes a corporate framework while leaving room for DGs to develop and implement their own approaches tailored to their unique needs.

A new Information Management Steering Board has been created to oversee the implementation of the strategy, to ensure coherence between actions and to prioritise them. One of the Deputy Directors-General of DG CONNECT has been appointed member of the Board and DG CONNECT will therefore contribute actively to the implementation of this strategy in 2017.

In particular, we will contribute to the mainstreaming of the DORIS Public Consultation Dashboard to support stakeholder feedback gathered through the Better Regulation portal. Building on the experience gained with the Connected platform and DORIS, we will also develop a single access point (dashboard) to streamline access to information and use data analytics and business intelligence to enhance business processes within the DG.

DG CONNECT has data analytics capacity to support policies. Its data, information and knowledge assets are managed through the following local or shared IT systems:

- Social intranet and collaborative platform (CONNECTED)¹,
- Stakeholder Relations Management (SRM) tool,
- Data oriented Services (DORIS) tools to process Better Regulation data as well as to support business intelligence and decision making processes within the DG,
- FP7 legacy and Horizon 2020 systems storing information on grant beneficiaries, projects and deliverables,
- Systems to manage policy and regulatory data (for instance on Broadband Infrastructures),
- Document repositories based on SharePoint and wikis.

External communication is managed through web platforms based on corporate solutions, and on publicly available commercial tools, such as social media.

Processes for document and knowledge management rely on corporate practices. The following measures are planned:

- Transfer of the business ownership of CONNECTED to the JRC.
- Measures to ensure widespread use of Sharepoint for collaborative working across the DG.
- Roll out of the SRM across the DG as the common tool for managing relations with our stakeholders.
- Sharing of FP7 deliverables with the Common Support Centre,
- Review and update of the DG's filing plan,
- Training and awareness raising about document management and knowledge sharing, particularly focused on leaks prevention,

¹ CONNECTED is a pilot project serving mostly DG CONNECT and the Joint Research Centre (JRC). The pilot phase will be continued under the business ownership of JRC with the technical support of DG DIGIT and a steering committee involving DG HR and SG.

- Automatic topic clustering and project portfolio management on DG CONNECT FP7 and H2020 deliverables using corporate and local analytics tools through a web interface,
- Update of the automatic transfer of information from the Project Portfolio Management application (PPM) to the Publications Office for publishing of FP7 project information on CORDIS.

Objective 1): Information and knowledge in your DG is shared and reusable by other DGs. Important documents are registered, filed and retrievable **Main outputs in 2017:**

Output	Indicator	Target
Provide training and coaching on document registration and filing	Training/coaching of unit secretariat and DMO correspondent	100% of units trained/coached
Awareness and compliance campaigns	2 campaigns (1 for Areslook and 1 for CONNECTED documents)	Q4 2017
Awareness and training campaigns for the DORIS service	Training and coaching of programme and policy officers (max 3 per unit)	Q2 2017
Roll-out of the SRM	Training and coaching of staff, alongside the work to promote SharePoint	Q4 2017

E. External Communication activities



DG CONNECT's external communication activities support the Commission's political priority on the DSM. 2017 opens with communication around the launch of the final DSM package falling under DG CONNECT's responsibility: data and ePrivacy. Our challenge at this mid-point in the DSM is to maintain momentum when communicating and engaging with the public, media and digital stakeholders on the implementation, delivery and

political endorsement of existing legislative and policy initiatives. Our communication will also support evaluation and future policy development as part of the mid-term reviews of the DSM and Horizon 2020.

DG CONNECT will continue to focus on joined-up, digital-first communications in partnership with the spokesperson service, the Commissioner's and VP's Cabinets, the DSM family DGs as well as the research & innovation family DGs and their policy teams. We will strengthen our stakeholder communication and ensure coherence with top-level communications priorities through DG CONNECT's internal networks and throughout the Commission by continuing to chair the Communication Network's DSM sub-group.

In 2017 we will develop specific narratives and define and implement communication actions around themes including:

- **DSM mid term review**, including the Digital Economy and Society Index DESI and European Digital Progress Report;
- Connectivity, including broadband, WiFi4EU & Roaming;
- **Digitising European Industry**, including Road to Rome: HPC, Next Generation Internet, Platforms of Platforms;
- **Data:** ePrivacy and Free Flow of Data;
- **Smart everything:** digital health, smart cities & energy, CAD;
- **Digital R&I**, including EU results and the H2020 mid-term evaluation;
- **Ongoing legislative files:** copyright, portability, AVMSD, electronic communications code.

The impact of DG CONNECT's communications outputs are measured in terms of **overall communications activity** across the **full range** digital-first communications **channels**. The overall outputs and targets can be seen in the first table below. Additional information per key communication theme can be seen on the second table below.

Objective 1): 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.

	.	
Output	Indicator	Target
How many people we have reached through our communication activities	1) People reading the Digital Single Market website	Yearly median 6,922 Unique browsers per day (base line 6,922) (keep at least stable)
	2) People using DAE website services	Total of the DSM website accounts 19,500 (base line 15,253) increase 28%
	3) People participating in events	Total of Event in the Box accounts 79,000 (base line 70.174) increase 12%
	4) People reading any of the DAE Newsletters	Total of Newsroom subscription for newsletters 250,000 (base line 230,270) increase 9% increase 21%
	5) People following DSM Facebook page 6) People following DSM Twitter account	Total of DSMFacebook likes 23,000 Likes (+20%) Total of DSM Twitter followers 80,000 (+20%) increase
	7) People following the DSM Youtube Channel	Total of DSM Youtube Channel Subscriptions 3,000

Main outputs in 2017:

		(baseline 2,462) increase 22%		
How people interacted with us on the base of	1) Engagement with DSM Facebook page	Cumulative monthly average 1,163 points engagement (+2%)		
our communication activities	2) Engagement with DSM Twitter account	Cumulative monthly average 8,617 points engagement (+2%)		
	DSM mid-term review			
Update of DESI 24.2.2017		Timely preparation of all content;		
Adoption of the communication – Q2 2017 (including EDPR). State of play of the	People we reach and engage with us via our communication in the different channels: web	Overall targets appearing on the table above in each channel;		
transformation towards a digital economy and society (including where Europe stands in the global digital context).	content, press material, social media, infographics and videos.	Dedicated media monitoring report analysis by a contractor will show the result of our communication effort.		
	Connectivity			
		Timely preparation of all content;		
WiFi4EU call – Q2 2017	People we reach and engage with us via our communication in the different channels: web	Overall targets appearing on the table above in each channel;		
End of Roaming – 15.6.2017 Digital Assembly event	content, press material, social media, infographics and videos;	Dedicated media monitoring report analysis by our contractor will show the		
15-16 June (under the Maltese presidency)	Proactive campaign on SoMe to promote the WiFi4EU call and what changes on roaming	result of our communication effort;		
	as of 15.6.2017.	For Digital Assembly additional target on audience: +/- 1000 participants.		
Digitising European Industry (DEI)				
Road to Rome digital event:		Timely preparation of all content;		
 Launch of the European Platform of 	People we reach and engage	Overall targets appearing on the table above in each		

Part 2. Main organisational management outputs for the year

national initiatives on DEI	with us via our communication in the different channels: web	channel;
• HPC, etc.	content, press material, social media, infographics and videos.	Dedicated media monitoring report analysis by a contractor will show the result of our communication effort.

Annual communication spending (based on	estimated commitments):
Baseline (2016) ² : 3 million EUR	Estimated commitments (2017) ³ : 550000 EUR

F. Examples of initiatives to improve economy and efficiency of financial and nonfinancial activities of the DG



In line with the prior analysis carried out within the context of the VP Georgieva Review, DG CONNECT has launched pilot projects and adopted some measures, which will be pursued in 2017, in order to optimize the use of resources and improve efficiency, thus

contributing to a leaner, less bureaucratic, better integrated and more flexible Commission.

This includes focussing resources on frontline activities by **minimising the number of full time equivalents working in support functions**:

(i) internal redeployment of support functions in order to strive towards a more balanced and reasonable level of support functions, in accordance with the targets agreed with DG HR;

(ii) Support the discussion - under the steer of the Diversity Network - to see how to adapt our working methods (and culture) to cope with the workload in times of reduced support levels.

As an outcome of the Synergies and Efficiencies Review, the HR function across the Commission is being modernised and largely centralised. Within this context, DG CONNECT will participate to the second wave of pilots between January and June 2017. More specifically, DG CONNECT will discuss proposals and make recommendations on the new processes and HR governance structure, contributing to synergies and efficiencies in the areas of HR management across the Commission.

² Baseline 2016 was based on total cost for the events whereas the 2017 figure covers the communication part only

³ Most of DG CONNECT communication is done in-house with internal human resources: web development and content, social media, audio-visual.

Annex 1. Glossary

Α

- AD= Administrator (Commission function level)
- AMC= Account Management Centre
- AIOTI= Alliance for IoT Innovation
- API= Application Programming Interface
- AVMSD= Audio-visual Media Services Directive

В

• BEREC= Body of European Regulators in Electronic Communications

С

- CAD= Connected and Automated Driving
- CAS= Common Audit Service
- 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
- DEI= Digitising European Industry
- DESI= Digital Economy and Society Index
- DG= Directorate-General (Commission)
- DMO= Document Management Officer
- DSI= Digital Service Infrastructure
- DSM= Digital Single Market

Е

- EASME= Executive Agency for Small and Medium-size Enterprises
- ECA= European Court of Auditors
- ECN= External Communication Network (Commission)
- ECSEL= Electronic Components and Systems for European Leadership
- EDPR= European Digital Progress Report
- EFSI= European Fund for Strategic Investments
- EIB= European Investment Bank
- EIDR= Entertainment Identifier Registry Association
- EIP= European Innovation Partnership
- 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= Framework Programme
- FTE= Full Time Equivalent

Η

- H2020= Horizon 2020
- HAN= Hermes-Ares-Nomcom
- HBP= Human Brain Project
- HPC= High Performance Computing
- HR= Human Resources

I

- ICT= Information and Communication Technologies
- IoT= Internet of Things
- IPCEI= Important Project of Common European Interest
- ISAN= International Standard Audiovisual Number

L

- LEIT= Leadership in Enabling and Industrial Technologies
- L&D= Learning & Development

Ν

• NIS= Network Information Security

Ρ

- PPM= Project Portfolio Management
- PPP= Private Public Partnership
- PRACE= Partnership for Advanced Computing in Europe (the pan-European high performance computing research infrastructure)

Q

C= Quarter

R

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

S

- SMEs= Small and medium-sized enterprises
- SRM= Stakeholders Relations Management
- SWD= Staff Working Document

Т

• TLD= Top-Level Domain

U

• UHF= Ultra High Frequency

V

• VP= Vice-President (Commission)