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ANNEX

ANNEX

to the

COMMISSION IMPLEMENTING DECISION

on the adoption of the work programme for 2018 and on the financing of Connecting Europe Facility (CEF) - Telecommunications Sector

CONNECTING EUROPE FACILITY (CEF)
TRANS-EUROPEAN TELECOMMUNICATIONS NETWORKS

WORK PROGRAMME 2018

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1 INTRODUCTION

The Connecting Europe Facility (CEF) was established by Regulation (EU) N° 1316/2013 of the European Parliament and of the Council¹ (the "CEF Regulation"). The Regulation determines the conditions, methods and procedures for providing Union financial assistance to trans-European networks in order to support projects of common interest. It also establishes the breakdown of resources to be made available for 2014-2020 in transport, telecommunications and energy.

In accordance with Article 17 of the CEF Regulation, the European Commission must adopt implementing acts for the multiannual and annual work programmes for each of these three sectors. In doing so, the Commission must establish the selection and award criteria for granting financial assistance under the CEF. These criteria must comply with the objectives and priorities in Articles 3 and 4 of the CEF Regulation and in Regulation (EU) No 1315/2013 of the European Parliament and of the Council² and Regulation (EU) No 347/2013 of the European Parliament and of the Council³ or with the relevant guidelines for trans-European networks in the area of telecommunications infrastructure.

Guidelines for trans-European networks in the area of telecommunications infrastructure (CEF Telecom guidelines) were adopted on 11 March 2014⁴. They cover the specific objectives, priorities and eligibility criteria for funding envisaged for broadband networks and digital service infrastructures.

The CEF Telecom guidelines define '*telecommunications infrastructures*' as both broadband networks and digital service infrastructures (DSIs). DSIs are composed of '*Core Service Platforms*' – central hubs which enable trans-European connectivity – and '*Generic Services*' which link national infrastructures to the Core Service Platforms. Finally, '*Building Blocks*' are basic DSIs which enable the more complex digital service infrastructures to function properly.

CEF Telecom focuses on areas of public interest and notably on the enabling infrastructure such as trusted cross border digital services including cybersecurity tools and world class computing and data storage capacities for public sector. These are essential to ensure the deployment of secure and effective digital cross-border public services in areas spanning from eHealth to open data. The programme aims to create full cross border digital infrastructure in areas of public interest by triggering the digital transformation of public sector services in the Member States all for the benefits of citizens and businesses.

¹ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010.

² Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU (OJ L 348, 20.12.2013, p. 1).

³ Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009 (OJ L 115, 25.4.2013, p. 39).

⁴ Regulation (EU) No 283/2014 of the European Parliament and of the Council of 11 March 2014 on guidelines for trans-European telecommunications networks and repealing Decision No 1336/97/EC (OJ L 286, 1.11.2017, p. 1).

Regulation (EU) No 2017/1953 of the European Parliament and of the Council⁵ modified the CEF Regulation and CEF Telecom Guidelines⁶ to promote internet connectivity in local communities. It provides financial assistance to public sector bodies that wish to provide, in accordance with national law, local wireless connectivity that is free of charge and without discriminatory conditions.

This document sets out the 2018 work programme (WP2018) for CEF Telecommunications (CEF Telecom) DSIs and wireless internet connectivity in local communities. It outlines the general objectives and priorities for actions to be launched in 2018 and explains how these can be tangibly achieved through the selected digital service infrastructure. It defines the scope of the programme as well as the envisaged level of funding, which will take the form of procurement, calls for proposals and other supporting actions.

In addition, it covers horizontal actions in all areas, as defined in Section 3 of the Annex to the CEF Telecom guidelines, including Technical Assistance for Broadband.

For further information on this programme, please refer to the CEF Telecom website at <https://ec.europa.eu/digital-single-market/connecting-europe-facility>.

⁵ Regulation (EU) 2017/1953 of the European Parliament and of the Council of 25 October 2017 amending Regulations (EU) No 1316/2013 and (EU) No 283/2014 as regards the promotion of internet connectivity in local communities (OJ L 286, 1.11.2017, p. 1).

⁶ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014R0283>

2 CONTEXT, OBJECTIVES AND OVERALL APPROACH

2.1 Political Context

The stated overall objective of the CEF is to enhance the Trans-European Networks/infrastructure (both physical infrastructure and digital infrastructure). This will promote the economic growth and supports the completion *and functioning* of the internal market in support of the competitiveness of the European economy.

The CEF aims to improve the daily life of citizens, businesses (including SMEs) and administrations through the deployment of trans-European interoperable infrastructures based on mature technical and organisational solutions. CEF also aims to promote the deployment and modernisation of broadband networks and supporting wireless connectivity in local communities that underpin these internet services by fostering the efficient flow of private and public investments.

The strategy for a Digital Single Market⁷ established in 2015 proposed measures to transform European economy and society. In this context, CEF DSIs are presented as key to maximise the growth potential of the European Digital Economy by enabling public authorities, businesses and citizens to carry out cross-border activities that are seamless and technologically advanced. eCommerce, eGovernment, open data, and Cybersecurity are the areas where CEF DSIs operate and have an impact.

The **Digital Single Market strategy mid-term review**⁸ (the DSM review) was adopted in spring 2017, and assessed the progress made by the EU in digital terms after two years since the launch of the strategy. The review confirms that progress towards a fair, open and secure digital environment depends on the development of a cyber-secure environment, a European Data Economy where the digitalisation of service sectors should be maximised, and of online platforms that are fair.

Both legal texts that articulate the CEF Telecom programme - the CEF Regulation⁹ and CEF Telecom Guidelines - recognise repeatedly the contribution of the CEF to the achievement of the Digital Single Market¹⁰. The findings in the mid-term review, made the case for reinforcing and building on current investments in specific digital infrastructures that are functional to these strategic priorities, where their impact will make a difference.

Among others, the DSM review highlighted the role of the CEF infrastructures in supporting the transition towards interoperable and standardised eHealth solutions¹¹; the preparation of the European Data Infrastructure to put in place a High Performance Computing (HPC)

⁷ COM (2015)192 Communication from the Commission of 6 May 2015 on A Digital Single Market for Europe

⁸ COM (2017)228 Communication on the Mid-Term Review on the implementation of the Digital Single Market Strategy - A Connected Digital Single Market for All of 10 May 2017 - <https://ec.europa.eu/digital-single-market/en/news/digital-single-market-commission-calls-swift-adoption-key-proposals-and-maps-out-challenges>

⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013R1316>

¹⁰ See recitals 2, 12, and section 3 of the Annex of CEF Telecom Guidelines, and recital 29 of CEF Regulation

¹¹ Under the Framework setup by the eHealth Network the eHealth Digital Service Infrastructure (DSI) supports the cross-border exchange of health data. The first Member States should go live in 2018.

environment for data-related service and activities¹²; and the preparation for the deployment of interoperable infrastructure and services for cooperative, connected, automated mobility (CCAM).

Since the first EU Cybersecurity strategy in 2013, the number, complexity and scale of Cybersecurity incidents and their impact on the economy and society have grown substantially. In tandem with growing digitalisation and the associated benefits of a connected economy and society with connected objects through the Internet of Things, the threat landscape has increased significantly. Furthermore cyber is now perceived by State and State-affiliated groups as a strategic weapon with destruction of infrastructure and data caused by targeted cyber attacks. Some of these attacks have been directed against high-profile targets, including power grids, important webmail services, central banks, telecom companies and electoral commissions. In addition it is predicted that cybercrime will continue rising and cost businesses globally more than USD 6 trillion (EUR 5.1 trillion) annually by 2021. In recognition of the urgency of the situation, the Commission is scaling up its response through the package of initiatives announced in the Joint Communication "*Resilience, Deterrence and Defence: Building strong cybersecurity for the EU*"¹³. CEF has an important role to play in upscaling the operational capabilities of Member States and facilitating operational co-operation through the Cybersecurity DSI, which has initially been focused on Computer Security Incident Response Teams (CSIRTs). While support for CSIRTs will continue in WP2018, the focus widens to also addressing the needs of other stakeholders such as operators of essential services (e.g. energy and transport), national competent authorities and single points of contact in the interests of increasing the level of network and information security in the Union.

In particular, CEF Telecom supports the deployment and use of high performance computing, storage and data management facilities in the frame of Digital Service Infrastructures. Following the initial support given in the WP 2017 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 workprogramme will reinforce the HPC-based ecosystems making use of Public Open Data. This investment will continue the efforts towards a full coordination of different programmes such as CEF or H2020, but also involve 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.

Furthermore, the WiFi4EU initiative, that started in 2017, encourages public sector bodies, such as municipalities, associations formed by municipalities, other local public authorities and institutions, libraries and hospitals, to offer free local wireless connectivity. To this end, it provides financial incentives in favour of those entities who want to provide free, high capacity local wireless connectivity in public spaces within their jurisdiction or at their sites of service. WiFi4EU aims to complement support from the European Structural and Investment Funds to broadband roll-out and deployment of WiFi.

The initiative will aim to promote citizens' interest in high capacity internet services, thus making a contribution to both the take-up of commercial broadband and to public

¹² The CEF Telecom Work Programme 2017 has supported the use of High Performance Computing capabilities for public open data

¹³ JOIN (2017) 450 final

infrastructure development. It also aims to contribute towards digital inclusion, improve coverage in disadvantaged areas, reinforce mobility and promote digital literacy. It also aims to promote the use of services offered by entities with a public mission.

The implementation of the WiFi4EU initiative has started in 2017.

2.2 Objectives, medium-term perspective and expected results

Objectives

The overall objective of the Connecting Europe Facility is to pursue economic growth and support the completion and functioning of the internal market in support of the competitiveness of the European economy.

CEF Telecom in particular is aimed at pursuing real improvements in daily life for citizens, businesses (including SMEs) and administrations through the deployment of solid trans-European interoperable infrastructures based on mature technical and organisational solutions. CEF focuses on providing operational services which are ready to be deployed and which will be sustainable and maintained over time. CEF Telecom equally aims at promoting the deployment and modernisation of broadband networks that underpin these internet services by fostering the efficient flow of private and public investments¹⁴ and supporting local wireless connectivity in centres of public life.

Expected results and the medium-term perspective

CEF Telecom, in its part dedicated to the digital services infrastructure, is designed to deploy this infrastructure across the EU, based on mature technical and organisational solutions to support exchanges and collaboration between citizens, businesses and public authorities. CEF Telecom focuses on providing functioning services which are ready to be deployed and which will be maintained over time, as opposed to developing pilots or technologies.

The vision for CEF Telecom is still that by 2020 it will deliver concrete benefits to citizens, businesses and administrations across the EU through mutually reinforcing and complementary digital service infrastructures, including supercomputers, and broadband networks, making the Digital Single Market more effective and contributing to economic growth.

More specifically, this means that consumers will be able to benefit from lower costs, better and quicker access to public services, public data and cultural information in all Member States. The services will be safer, more secure and available in all EU languages, and over time be supported by new faster broadband networks.

For businesses, a successful CEF programme will mean more opportunities and better cross border public services. It will become less time-consuming and less costly to interact with public authorities. Transactions will be interoperable, secure and trustworthy across Europe.

For public administrations, CEF Telecom is expected to deliver greater efficiency and reduced transaction costs across the different domains with all Member States participating fully in cross-border activities.

¹⁴ Financial instruments for Broadband have been included in previous years' workprogrammes

CEF Telecom projects aim to be mutually reinforcing and complementary. There are many potential linkages between the digital services; in particular, Building Blocks such as eIdentification, eAuthentication, eDelivery, eInvoicing or Automated Translation and Sector Specific DSIs like Cybersecurity enable the proper functioning of all the other DSIs listed in the CEF Telecom Guidelines. It has to be noted that several Building Blocks are available following the work done within previous WPs and can be used by any organisation, being it public or private^{15 16}.

In addition, the exploitation of HPC by the DSIs within CEF share a rationale of inclusion and economic advancement. Easier and widespread access to the internet network will contribute to an easier and more widespread use at local level of online services, including public services. In addition, a better use and processing of data at all levels will lead to digital solutions that will push the economy and the society forward. The DSIs adoption of HPC technologies will allow the public sector as well as business and citizens to take full advantage of new services built over supercomputers.

Last but not least, the WiFi4EU initiative reinforces local wireless Internet connectivity free of charge and without discriminatory conditions and aims to improve access to high-speed broadband, promote take-up of broadband and facilitate access to digital services. This in turn aims to help reduce the digital divide, increase quality of life and promote the development of local small and medium-sized enterprises in many municipalities across the EU.

The expected benefits and outcomes and the medium-term perspective are described in more detail for each Digital Service Infrastructure in Section 3 and for the WiFi4EU initiative in Section 4. Great importance will be attached to the monitoring of performance and evaluation. Member States will need to be closely involved in the monitoring of projects of common interest to ensure quality control and ownership. This is done through regular performance reviews whereby funding can be discontinued if clear performance targets are not met.

Long-term sustainability of the DSIs

The study "Connecting Europe Facility 2014-2020 - Long-Term sustainability of Digital Service Infrastructures" was concluded in spring 2017 and provides indications for the long-term sustainability of the DSIs. The study provides a substantive analysis and assessment of a range of different solutions for ensuring the long-term sustainability of the DSIs, considering four aspects: finance, governance, operations, and IT/Enterprise architecture. It analyses and assesses a range of different solutions for ensuring the long-term sustainability of the DSIs beyond 2020 based on an analysis of the needs and requirements of DSIs in terms of governance, operations, financing and architecture.

Results show varying scenarios where for some DSIs funding can be reduced as other sources of funding can take over, whereas for others investments will remain necessary in future. It constitutes a valuable input in the context of the proposal the Commission will make for the next Multiannual Financial Framework.

¹⁵ A full description of the available Building Block is available here <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/CEF+Digital+Home>

¹⁶ The machine translation service (eTranslation) of the CEF Automated Translation building block is currently not available for use by private companies.

Communication

Digital Services can support the realisation of the Digital Single Market only if deployment is accompanied by widespread uptake and usage.

These three implementation aspects – deployment, uptake and usage – can only take place if supported by adequate communication. On one hand stakeholders carrying out the deployment should be aware of the funding opportunities and of the benefits conveyed by the solutions offered. On the other, communication should make sure that citizens themselves share the vision of a European and interoperable eco-system of Digital Services. A widespread, effective communication succeeding in the defined goals, can only be achieved if both the Commission and Member States join their effort.

Based on a thorough analysis of the existing communication activities across all DSIs, in spring 2017 a Communication Strategy and Plan for the CEF DSIs was concluded. The main recommendations stemming from the study target the development of a common visual identity and growth framework for DSIs, the need for a coordinated approach to the outreach, further development of a central communication hub offering an overview of the programme, and the measurements of DSI communication performance against audience engagement. As a follow-up to the recommendations, online toolkits and community support¹⁷ have been developed in order to create a common framework for the dissemination activities both to the relevant Commission Services and Member States. The Commission is making further efforts to achieve a coordinated approach to the outreach and is actively promoting the DSIs eligible for funding.

2.3 CEF Telecommunications Work Programme 2018

The CEF Telecom Work Programme 2018 (WP2018) will include actions contributing to projects of common interest in the field of digital service infrastructures (DSIs), WiFi4EU and the Technical Assistance to Broadband.

2.3.1 Approach to choose DSIs

According to Article 6 of the CEF Telecom Guidelines, actions contributing to projects of common interest in the field of digital service infrastructures must meet all the following criteria in order to be eligible for funding:

- reach sufficient maturity to be deployed, as proven in particular through successful piloting under programmes such as the EU programmes related to innovation and research;
- contribute to EU policies and activities in support of the internal market;
- create European added value and have a strategy, which must be updated when appropriate and the quality of which is to be demonstrated by a feasibility and cost-benefit

¹⁷ <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Media+library>

assessment, together with planning for long-term sustainability, where appropriate through funding sources other than CEF;

- comply with international and/or European *standards* or open specifications and orientations for interoperability, such as the European Interoperability Framework and capitalise on existing solutions.

The Work Programmes at the beginning of the CEF programme could fund only a selection of DSIs based on their maturity. The last two Work Programmes (WP2017 and WP2016) could include all DSIs indicated in the legislation, as the background work carried out in parallel to the CEF programme has brought all DSIs to a sufficient level of maturity for deployment. WP2018 also includes two new DSIs: eArchiving and P2P Mobile Payments.

2.3.2 Work Programme content overview

DSIs to be supported by WP2018 are selected according to their implementation needs and considering the goal of an ultimate sustainability of the programme.

The DSIs that will receive funds for additional or continuation of activities in 2018 have already been supported under previous Work Programmes. Some activities launched in 2014, 2015, 2016 and 2017 still need to be completed and are funded via budget committed in the respective years. The DSIs for which funding is foreseen in 2018 are:

- Europeana and Safer Internet, which are identified as well-established in the CEF Telecom Guidelines. Funding will ensure their continued operation in accordance with the Guidelines.
- Other mature DSIs: eIdentification and eSignature, eDelivery, eInvoicing, Public Open Data, Automated Translation, Cybersecurity, eProcurement, On-line Dispute Resolution (ODR), Business Registers Interconnection System (BRIS), eHealth, Electronic Exchange of Social Security Information (EESSI) and the European e-Justice portal.
- A **new Sector Specific DSI** to support P2P Mobile Payments.
- A **new Building Block DSI**, eArchiving, which has been selected jointly with Member States among a set of proposed new DSIs.

As regards to broadband infrastructure, the support for the Technical Assistance will continue and complete the activities started in 2016 and continued in 2017. The WiFi4EU initiative will continue the activities started at the end of 2017 by supporting projects providing free local wireless Internet connectivity.

2.3.3 Indicative budget

The total estimated funding for the seventeen DSIs and related support activities for 2018 amounts to about EUR 130.33 million including the 2.33 % contribution from EFTA countries. The table below shows the indicative 2018 funding for DSIs with the split between core platforms and generic services. Funding for broadband technical assistance and other broadband support actions amounts to EUR 1.05 million. Funding for the WiFi4EU initiative amounts to EUR 50.10 million including the 2.33 % contribution from EFTA countries. More

detailed indications regarding the scope and duration of the funding are provided in Section 3 and Section 4.

The budget figures given in this work programme are indicative. Unless otherwise stated, once the proposals have been assessed, the final figures may vary by up to 20% compared to the figures in this work programme.

Table 1 Overview of activities and their indicative funding for 2018

DSI	Core Service Platform - CSP	Generic Services - GS	Indicative duration (years)
<i>Well established DSIs</i>			
Europeana	0	4	1.5 (GS)
Safer Internet	3.5	18	2-2.5(CSP); 2-2.5(GS)
<i>DSIs already supported under CEF WP2014, WP2015, WP2016 and/ot WP2017</i>			
eIdentification and eSignature	2	8	1(CSP); 1.5(GS)
eDelivery	2	0.5	1.5(CSP); 1(GS)
eInvoicing	0.8	5	1.5(CSP); 1.5(GS)
Public Open Data (including HPC)	8.5	18.5	3(CSP); 3(GS)
Automated Translation	3.5	5	3(CSP); 2(GS)
Cybersecurity	7.5	13	3(CSP); 2(GS)
eProcurement	0	3	1.5 (GS)
Online Dispute Resolution (ODR)	2	0.4	2 (CSP); 1(GS)
eHealth	3	5	4(CSP); 1.5(GS)
BRIS	1	0	2 (CSP)
EESSI	5	0	1(CSP)
European e-Justice Portal	3	4	2(CSP); 2(GS)
<i>NEW DSIs</i>			
eArchiving	2	0	1.5(CSP)
P2P Mobile Payments	1	0	1(CSP)
Total	44.8	84.4	
WiFi4EU			
** WiFi4EU vouchers	49.550		2

Programme Support Actions			
DSI Communication	0.18		
Studies	0.47		
Maintenance and access to IT tools	0.1		
*Broadband Technical Assistance	0.333		
*Broadband Specific Support Actions	0.717		
** Other support actions to WiFi4EU	0.45		
** WiFi4EU Communication	0.1		
DSI projects evaluations and reviews	0.385		
Total	2.735		
Grand Total			
	181.485		

Activities marked * are financed through the budget line 090301 “Preparing Broadband for public and/or private financing”, activities marked ** are financed through the budget allocated to line 090304 "WiFi4EU- Support the deployment of free local wireless connectivity". All other activities are financed via the budget line 090303 “Promoting interoperability, sustainable deployment, operation and upgrading of trans-European digital service infrastructures, as well as coordination at European level”.

2.3.4 Implementation mechanisms

In accordance with the CEF Telecom guidelines, actions contributing to projects of common interest in the field of digital service infrastructures will be supported by procurement and/or grants.

The DSI Core Service Platforms will be implemented primarily by the European Union while Generic Services are to be implemented by the parties connecting to the relevant Core Service Platform.

The WiFi4EU initiative will be implemented through a voucher scheme. It is envisaged that two calls for applications resulting in grants will be supporting public local wireless access projects in 2018.

The Broadband Competence Office Support Facility will coordinate the work of Broadband Technical Assistance contact points regarding the provision of technical assistance services to broadband project promoters. Broadband Technical Assistance contact points will not be financed under this Work Programme.

EU financial support will take the form of:

- procurement, which will yield service contracts, and with the EU covering the totality of the cost and owning the results and the related intellectual property and exploitation rights;
- calls for proposals (grants), whereby the EU provides financial support and the beneficiaries retain control over their results. The CEF Regulation stipulates that EU funding under grants cannot exceed 75 % of the eligible cost of each action;
- procurement to set up the Support Facility for Broadband Technical Assistance (partial financing).
- vouchers (grants) for the wireless internet access will cover 100% of the eligible costs as stated in Regulation (EU) No 2017/1953

For these instruments, except the WiFi4EU initiative, well-established procedures and templates are in place. The WiFi4EU initiative is novel in the set-up of the voucher scheme and the application procedure and grant agreement are simplified versions of the established CEF templates. The experience of the first call in 2017 will provide valuable experience to adapt these instruments if necessary. More information is provided in Sections 3, 4 and 5. Detailed information will be provided in the call documentation.

3 DIGITAL SERVICE INFRASTRUCTURES CALLS

This section provides an overview of the individual DSIs, setting out the actions planned in 2018 and the concrete benefits to citizens, businesses and administrations that would be achieved. The DSIs must be seen as essential elements of a well-functioning Digital Single Market (DSM). They provide key services to enable platforms from across Europe to interconnect and to make them accessible and user-friendly and therefore make the DSM work in practice. In the text below, attention is paid to highlight whether a DSI constitutes a Building Block and when use is made of existing Building Blocks.

3.1 Access to digital resources of European heritage – Europeana

3.1.1 Background and rationale

3.1.1.1 The specific policy framework

With only around 10% of Europe's cultural heritage digitised and digitised resources still lacking visibility, especially across national boundaries, more digitised resources of relevance should be brought online, and their cross-border use and take-up actively pursued. Digital resources of European heritage have a big potential to serve as input for the economy of the cultural and creative sector, which accounts for around 4% of EU jobs and GDP.

Launched in 2008 as the common, multilingual access point to digital resources of European heritage, Europeana (www.europeana.eu) currently provides access to around 53 million objects from some 3,700 institutions across Europe, operating as a multi-sided platform intending to create value for cultural heritage institutions, for end-users and for creative re-use.

3.1.1.2 The contribution to the Digital Single Market

Europeana contributes to the Digital Single Market by developing the mechanisms, relationships and processes to distribute improved data, and propagating standards in interoperability of data, rights labelling and models to foster user engagement and facilitate creative re-use.

On 31 May 2016, the Education, Youth, Culture and Sport Council adopted Council Conclusions on the role of Europeana for the digital access, visibility and use of European cultural heritage ('Council Conclusions'). The Council Conclusions¹⁸ express continued support from Member States for Europeana, both from a cultural and a digital innovation perspective, and give renewed political guidance to the mission and priorities of Europeana. They invite the Commission to support the Europeana DSI by a combination of procurement and grants. Procurement will cover the full cost of services in the Core Service Platform necessary to ensure its sustainability, while grants will support Generic Services implementing user-oriented projects co-funded by Member States.

¹⁸ <http://data.consilium.europa.eu/doc/document/ST-9008-2016-INIT/en/pdf>

3.1.2 Implementation 2018

3.1.2.1 Baseline

Core Service Platform

CEF funding supports the continuous operation and upgrade of the Europeana platform for access to digital resources of European heritage. The platform allows cultural heritage institutions to connect and share their collections and metadata across sectors and borders. It reaches users through the Europeana Collections portal, targeted thematic collections, participatory campaigns and through external platforms (such as Wikipedia, Facebook, Pinterest). It further promotes re-use and facilitates take-up of digital cultural content and metadata in other sectors, e.g. research, education, tourism or the creative industries.

CEF support facilitates also the coordination, activities and expansion of the Europeana Network¹⁹ to promote capacity-building and cross-border collaboration among cultural institutions and professionals, as well as cultural and digital innovation.

The Core Service Platform is required to make all necessary dispositions to host the projects funded under Generic Services. Support for the Core Service Platform provided in Work Programme 2017 (WP2017) covers a duration of up to two years to allow more stability and sustainability in financial and operational management.

Generic Services

Support for user-oriented projects has been made available in CEF work programmes since 2016, calling for the following actions: (i) development and curation of thematic collections on the Europeana platform; (ii) tools for end-users and (iii) the realisation of concrete examples of re-use of the material accessible through Europeana in other sectors, in particular research, education, creative industries or tourism.

3.1.2.2 Actions to be started in 2018

The Council Conclusions on the role of Europeana for the digital access, visibility and use of European cultural heritage adopted on 31 May 2016 call for "the realisation of cultural and user-oriented projects that build on the Europeana infrastructure, and which are to be co-financed under the CEF as generic services with the involvement of cultural heritage institutions and other public and private parties". It is therefore proposed to provide support to cultural institutions and other public and private partners to increase the amount of data accessible through Europeana that is of high quality and suitable for reuse as well as to increase awareness and usage of Europeana.

Supported actions will set concrete targets for the improvement of already available material and for making available new high-quality material, to Europeana platform, in accordance with the Europeana publishing framework, that can be used to enhance existing collections or create new ones. Activities may include digitisation, enhancing the structure and richness of metadata to increase its searchability and findability, and/or the development of concrete applications for the reuse of Europeana cultural heritage material in research, education, creative industries or other sectors. The actions will also provide expert support and

¹⁹ The Europeana Network gathers cultural heritage, technology and creative professionals who exchange and promote good practices in the world of cultural heritage, support the day-to-day activities of Europeana and advise on its strategy.

encouragement to cultural institutions to improve the quality of the content and metadata that they make available. This may be achieved by strengthening capacity building among institutions and professionals, growing awareness and usage of Europeana across Europe and serving as access points to Europe's cultural heritage available in Europeana

3.1.2.3 Use of Building Blocks

Europeana is analysing the possibility of reuse of the Automated Translation Building Block in its Core Service Platform.

3.1.2.4 Benefits and expected outcomes

The expected outcomes of the Europeana DSI are efficient solutions for the trans-European interoperability and accessibility of digital resources of European heritage, to increase their cross-border visibility, use and take-up, and to help raise awareness of and realise their full creative and economic potential.

Connecting Europe by making its culture available for everyone enables users (whether citizens, students, researchers or cultural/creative entrepreneurs) to find and use relevant material from all across the continent. Standardising and making cultural resources held by Europe's memory organisations internet-friendly and exposing their collections to the wider world offers content creators and developers opportunities to feed on a pan-European wealth of digitised resources in a harmonised way for developing new products and services, adding value to the collections and providing new user experiences, in full compliance with copyright law. Digital cultural heritage material represents a significant resource, e.g. for the tourism industry in promoting cultural tourism. Better access to heritage information attracts travellers, increases the length of stay and the related expenditure.

For cultural institutions, participation in Europeana offers networking and innovation opportunities as well as cost savings (on standardisation and interoperability, data storage and transfer, exposure, know-how/cooperation).

3.1.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The actions supported in 2018 under Generic Services should result in an increase in the amount of data accessible through Europeana that is of high quality and suitable for reuse, increase awareness and usage of Europeana and improve the end-user experience.

3.1.2.6 Governance, operations and stakeholder involvement

As a distributed trans-European digital service infrastructure, Europeana is a joint effort by Europe's cultural institutions. The current service is run by Europeana Foundation, in cooperation with a number of domain and thematic aggregators supporting the aggregation of metadata, distribution partners supporting re-use and distribution of Europeana data as well as expert partners supporting work including dissemination, digitisation statistics, audience development and business model innovation.

The Europeana Network Association gathers cultural heritage, creative and technology professionals, who exchange and promote best practice and stimulate capacity building and cross border co-operation in the cultural heritage community, and provides input on Europeana's strategy and activities through its elected Members' Council. Six of its members represent the Europeana Network in the Governing Board of the Europeana Foundation.

The Recommendation on the digitisation and online accessibility of cultural material and digital preservation²⁰ calls upon Member States to contribute to the further development of Europeana. In line with the Council Conclusions, the Commission has set up the Expert Group on Digital Cultural Heritage and Europeana (DCHE)²¹, to assist the Commission in monitoring progress with the implementation of the Recommendation and to provide guidance on Europeana's strategic priorities for CEF annual Work Programmes²². In addition, the DCHE provides a forum for involvement of the Member States and their cultural institutions. Europeana Foundation reports regularly on its activities and its financial situation to the DCHE which is chaired by the Commission and meets twice a year.

3.1.2.7 *Type of financial support*

Generic Services will be financed through grants. Proposals may be submitted by consortia composed of a minimum of three organisations based in three different Member States and/or EEA countries participating in the CEF Telecom programme.

Title:	Access to digital resources of European heritage – Europeana – Generic Services
Indicative total budget for 2018:	EUR 4 million
Type of financial support:	Grants – call for proposals
Funding rate:	Up to 75% of the total eligible cost
Consortium composition:	minimum of three organisations three or more eligible countries
Eligible organisations:	Any
Indicative duration of the action:	18 months
Indicative call publication date:	Q1 2018
Indicative call closing date:	Q2 2018

3.2 Safer Internet service infrastructure – for making a better internet for children

3.2.1 Background and rationale

In today's digital society, children and youth are increasingly important actors as consumers and creators of online services and content. One out of three Internet users is a child²³. Children at ever younger ages spend a significant part of their time online, frequently without any supervision by adults. While the Internet offers many opportunities, it also opens up certain risks to vulnerable users such as children. To be able to mitigate the risks that might be

²⁰ OJ L 283, 29.10.2011, p. 39

²¹ Commission Decision of 7.3.2017 setting up the Expert Group on Digital Cultural Heritage and Europeana, C(2017) 1444 final

²² Point 29 of the Council conclusions on the role of Europeana for the digital access, visibility and use of European cultural heritage adopted on 31 May 2015.

²³ One in Three: Internet Governance, and Children's Rights, Sonia Livin Generic Service stone, John Carr and Jasmina Byrne, Nov. 2015

encountered online, children need accessible and age appropriate content and services; adequate protection and support from the effects of harmful content and behaviour such as cyberbullying, hate speech and sexting; and digital skills and competences to fully and safely benefit from being online.

The Safer Internet DSI addresses these evolving needs by the deployment of a Core Service Platform providing access to and delivery of child-appropriate and child-safety related content and services, including databases that support helpline and hotline transactions, for the community of Safer Internet stakeholders.

3.2.1.1 The specific policy framework

In May 2012, the Commission adopted the communication European Strategy for a Better Internet for Children (BIK), which sets out a coherent EU-wide strategy to provide concrete measures for making the internet a trusted environment for children.²⁴ The Safer Internet DSI supported under CEF Telecom is the main funding instrument for implementing the BIK strategy.

3.2.1.2 The contribution to the Digital Single Market

The rules on protection of minors were one of the aspects subject to the review of the Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive)²⁵ as part of the strategy for a Digital Single Market. Accordingly, the Commission adopted a new legislative proposal amending the directive²⁶ in May 2016 in order to create a media framework for the 21st century. The proposal is currently subject to interinstitutional talks, with a foreseen adoption in the autumn 2017.

The Safer Internet DSI also contributes to an inclusive e-society which is one of the main objectives of the Digital Single Market.

3.2.2 Implementation 2018

The overall objective of the DSI is to deploy services that help make the Internet a trusted environment for children by providing an infrastructure to share resources, services and practices between national Safer Internet Centres (SICs) and to provide services to their users, including industry. All services are being accessed and delivered either at EU level or via interoperable national SICs forming part of the infrastructure.

3.2.2.1 Baseline

Core Service Platform

Following the establishment of the pan-European Core Service Platform under the WP 2014, a stable version including the public [BIK portal](https://www.betterinternetforkids.eu/)²⁷, was made available by the end of 2015.

²⁴ COM(2012) 196 of 2.5.2012

²⁵ L 95/1 of 15.4.2010

²⁶ COM(2016) 287 25.5.2016

²⁷ <https://www.betterinternetforkids.eu/>

The WP 2016 provided for actions to continue supporting the coordination, maintenance and further deployment of the DSI until 2019.

Generic Services

Providers of Generic Services (Safer Internet Centres) exist in all EU Member States (except in Sweden) and also in Norway and Iceland. Following a call for Generic Services in 2014, a second call was published under the WP 2015, which provides co-funding for the services until the end of 2018.

3.2.2.2 Actions to be started in 2018

Core Service Platform

Building on the existing infrastructure, the objective in 2018 is to continue supporting the maintenance and further deployment of the Safer Internet Core Service Platform, by providing the following services:

- a single entry point to online tools, resources and services for SICs to: collaborate on research-based resource development, assess and exchange good practices, materials and services in support of awareness raising and teaching eSafety; compile statistics at European level to measure the impact of activities; facilitate and support youth participation by incorporating a safe, dedicated space for youth engagement;
- back-office reporting facilities aligned with law enforcement agencies' activities, for helplines and hotlines including secure environments for gathering and sharing data of child sexual abuse imagery and videos to enhance hotlines' capability and capacity to analyse, identify and remove illegal online content;
- a central point of access for the general public to find information, guidance and resources, including referrals to online quality content dedicated to children;
- capacity-building, including development of tutorials, mentoring schemes and training opportunities for the community of use, including the educational sector;
- broad outreach to stakeholders by organising pan-European events, campaigns and meetings involving industry, researchers and NGOs.

Generic Services

Building on their interoperability with the Core Service Platform, SICs will maintain and expand national platforms across the EU to provide the following services:

- an awareness centre for raising awareness among children, parents and teachers and other professionals working with children about risks they may encounter via online related activities and empower them to deal with these risks, building on digital repositories, from which specific awareness toolkits and services will be adapted and deployed, in cooperation with third parties (schools, industry);
- helpline services for giving advice and support to parents and children on issues related to children's use of digital technologies and services;..
- a hotline for receiving and managing reports from the public relating to illegal online child sexual abuse imagery and videos. The hotline should undertake a preliminary assessment of the legality of the content reported, forward the report to the relevant law enforcement bodies and/or hosting provider, and monitor the removal of content assessed as illegal. Collaboration with law enforcement concerning development of effective preventive measures should be explored.

3.2.2.3 Use of Building Blocks

The eID Building Block, exploiting EU-Loginidentification services, is foreseen to be embedded in the next version of the platform.

In addition, the use of the Automated translation Building Block for some of its content (i.e. text snippets) is being considered for the next version of the public BIK portal.

3.2.2.4 Benefits and expected outcomes

The ultimate beneficiaries are citizens, primarily children, who will be given the possibility to improve their digital skills and actively participate in a safer digital environment owing to increased awareness and empowerment strategies. Parents, care-takers, teachers and professionals working with children at risk are key intermediaries who will be able to have a higher level of understanding and trust in the way in which content and services are accessed and used by children. Public authorities and particularly law enforcement agencies should be able to develop better preventive and pro-active measures ensuring the well-being of children. Industry stands to benefit from increased market opportunities for content and for impact of awareness campaigns, and from cross-border provision of associated services (helplines, hotlines). Synergies will be created by bringing together safer internet stakeholders to share resources and work collaboratively to promote child online safety across Europe.

3.2.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The activities launched in 2018 will allow further deployment of relevant services to deliver a safer online environment for children and to remove illegal child sexual abuse imagery in an effective manner. While SICs will continue reaching out to EU citizens through their activities at national level, the European network will continue to support the community through enhanced, evidence-based tools and resources.

3.2.2.6 Governance, operations and stakeholders involvement

National authorities are being involved in the implementation and deployment process of the generic services provided through the national SICs. The long-term aim is that the governance structure as a whole reflects the roles of national representatives, of industry, of civil society and the Commission, and that the various actions and initiatives are calibrated and concerted. Special attention should be given to the funding and execution of policy-relevant research and knowledge enhancement. In the medium term, this is met through a governance group set-up by the coordinating networks of the SICs, with input from a group of national representatives that was formed in the context of monitoring the policy indicators resulting from study on benchmarking Safer Internet policies in the Member States²⁸.

3.2.2.7 Type of financial support

The Core Service Platform will be funded via procurement. Tenders may be submitted by single organisations or by consortia composed of several organisations.

Title:	Safer Internet service infrastructure – Core Service Platform
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²⁸ <https://ec.europa.eu/digital-single-market/news/study-better-internet-kids-policies-member-states>

Indicative total budget for 2018:	EUR 3.5 million
Type of financial support:	Procurement - Open call (indicative number of contracts: 2)
Duration of the action:	24 to 30 months
Indicative call publication date:	Q1/Q2 2018

Generic Services will be financed through grants. Proposals may be submitted by applicants in EU Member States or EEA countries participating in the CEF Telecom programme. Only one Safer Internet Centre, which must be composed of an awareness centre, helpline and preferably a hotline, will be funded within a given country.

Title:	Safer Internet service infrastructure – Generic Services
Indicative total budget for 2018:	EUR 18 million
Type of financial support:	Grants – Call for proposals
Funding rate:	Up to 50% of total eligible costs
Consortium composition:	Any
Eligible organisations:	Any
Indicative duration of the action:	27 months
Indicative call publication date:	Q1 2018
Indicative call closing date:	Q2 2018

3.3 Electronic identification and authentication – eIdentification and eSignature

3.3.1 Background and rationale

3.3.1.1 The specific policy framework

Under the heading 'Electronic identification and authentication – eIdentification and eSignature' the WP 2014 launched the eIdentification (eID) and eSignature Building Blocks DSIs providing funding for their Core Service Platforms. The provision of such services is based on the regulatory framework established by Regulation (EU) 910/2014 of the European Parliament and of the Council of 23 July 2014²⁹ ("the eIDAS Regulation").

3.3.1.2 The contribution to the Digital Single Market

eIdentification and eSignature are key enablers for the realisation of a Digital Single Market. Thanks to the eIDAS Regulation, providing for the legal cross-border recognition of eID and eSignatures (as well as other trust services like eDelivery), the European Union can benefit

²⁹ Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (OJ L 257, 28.8.2014, p. 73).

from a predictable regulatory environment to enable secure and seamless electronic interactions between businesses, citizens and public authorities.

3.3.2 Implementation 2018

3.3.2.1 Baseline

eIdentification: Core Service Platform

WP 2014 provided support (e.g. eIDAS sample implementation, service administration and stakeholder engagement) for the building of the "eIDAS nodes" (connection points) within Member States, which are essential to the interoperability framework. Version 1.1 of the technical specifications for the nodes was endorsed by Opinion No. 2/2016 of the Cooperation Network on 16 December 2016. In WP 2017 the services offered by the Core Service Platform were extended to support the linkage of attributes in the form of data, additional to existing core data, the use of mandates and authorities, consistent inter alia with the ISA² activities. The WP 2017 also provided for technical support and advice to the Member States, including the maintenance of the reference implementation, in order to complete the provision of a network of nodes across the EU.

eIdentification: Generic Services

WP 2014 provided for the building of the nodes (connection points) within Member States which are essential to the interoperability framework. Version 1.1 of the technical specifications for the nodes was recently published. WP 2015 provided for the connection of Member State public services to the node, thereby enabling cross border transactions compliant with the eIDAS Regulation. WP 2016 shifted the focus for connection to the node mainly to private sector entities with potentially high volume of cross border transactions, such as financial institutions. WP 2017 further supported the building of nodes for those Member States who have not yet done so, the integration of eID in existing e-service/system/online platform to enable private and public sector entities (including local administrations) to accept eIDs and eIDAS authentication to facilitate the mobility of students in the European Union.

eSignature: Core Service Platform

WP 2017 supported activities to help maintain and update the software developed under the eSignature DSI, i.e. the DSS open-source library and the TL-Manager supported in previous Work Programmes, as well as the new Trusted List Browser tool which provides a user-friendly version of the browsing functionality of the TL-Manager. It also helps provide help and training for (1) national bodies responsible for trusted lists and national Trusted List Scheme Operators, to ensure that they can operate services at a permanent and predictable quality level to ensure cross-border accessibility, availability, conformance, and trustworthiness of the national trusted lists into a single European Trust Backbone permanently available to all relying services across EU borders and (2) providers of solutions implementing advanced electronic signatures to rely on the Digital Signature Services (DSS) software library for the creation and validation of e-signatures in compliance with the eIDAS Regulation.

WP 2017 also promoted the uptake and speed up of the use of the eSignature DSI among Generic Services to both public and private entities established in the EU and EEA countries participating in the CEF Telecom programme.

eSignature: Generic Services

WP 2017 helped develop systems for Member States and the private sector relying on the eSignature DSI Building Block (DSS).

3.3.2.2 Actions to be started in 2018

eIdentification: Core Service Platform

The Core Service Platform offers services to support Member States at the technical and operational level. In WP2018 these will be further extended to support the onboarding of new domains. Technical support and advice will also be supported, including the maintenance of the reference implementation, in order to complete the provision of a network of nodes across all Member States and support all activities that have an impact on the update of eID.

eIdentification: Generic Services

Generic Services under WP2018 will continue to offer support to Member States for enabling attributes, mandates and authorities to be associated with electronic identities for cross-border use through the eIDAS node. Actions supported should enhance the services provided to the citizen. In addition, WP 2018 will offer support for the integration of the eID DSI in existing e-services/systems/online platforms in different public or private sectors to create an eIDAS-based ecosystem across the European Union. Possible application areas could be financial or mobile communications, but in particular support to student mobility by enabling students to identify themselves in a trusted manner across borders (in line with the EU Student Card Initiative), and thus benefit from the 'Once Only Principle' in higher education.

eSignature: Core Service Platform

Core Service Platform activities in the WP2018 will continue to be focused on maintaining and updating the three pieces of software previously provided to enhance user experience, and ensure that relevant content (such as tools, support, training materials, best practices, views and news) are available through the [CEF Digital Single web portal](#).

Core Service Platform activities will also provide help and training for national bodies responsible for trusted lists and national Trusted List Scheme Operators and will help providers of solutions implementing advanced electronic signatures to rely on the Digital Signature Services (DSS) software library for the creation and validation of e-signatures in compliance with the eIDAS Regulation.

All the Core Service Platform activities will continue promoting the uptake and speed up of the use of the eSignature DSI among Generic Services to both public and private entities established in the EU and EEA countries participating in the CEF Telecom programme.

eSignature: Generic Services

Generic Services under the WP 2018 will help develop systems for Member States and the private sector for the use of electronic signatures and electronic seals in line with the eIDAS

Regulation. Developed systems should rely on the eSignature DSI Building Block 's DSS open-source library, either by incorporating the library's code or as a reference implementation.

3.3.2.3 Use of Building Blocks

eSignature and eID are stand-alone Building Blocks, which are used by other DSIs.

3.3.2.4 Benefits and expected outcome

eIdentification

The Core Service Platform will offer Member States support services to build their eID based services. The eID network was previously piloted through the STORK project funded under the CIP-ICT Policy Support Programme. In the context of STORK pilots, a number of Member States and associated countries are currently connected to the eID network of nodes. The actions of 2018 will enhance the deployment of eIDAS compliant eID nodes, and help the Member States to meet the 29 September 2018 deadline by which, as set out in eIDAS Regulation, Member States will have the obligation to recognise the notified eID schemes from the other Member States.

By this deadline, all the activities necessary for the operations should be set in place and mature (e.g. Release Management, Security Breach Notification).

Additionally the activities will support the on-boarding of new domains.

eSignature

TL-Manager is a web application for browsing, editing and monitoring Trusted Lists that Member States have to establish, maintain and publish in line with Article 22 of the eIDAS Regulation (and related Commission Implementing Decision (EU) 2015/1505). Resulting from the need to enable anyone to browse the Trusted Lists, the Trusted List Browser is also a web application complementing the TL-Manager which is aimed at the larger public that would like to look for a (qualified) trust service (provider) in the EU. It is therefore designed to be user-friendly and mobile-friendly and supports the use of the EU trust mark. Trust marks can link to Trusted List Browser, allowing any user to verify quickly that a trust service is qualified. Under the WP2018, both TL-Manager and Trusted List Browser will continue to be maintained and updated with a view to provide a better user experience by adding new functionalities. Concerning the Digital Signature Services (DSS) library used to validate or create eSignatures, actions in the WP2018 will continue to support reliance on DSS libraries by solution providers that are already implementing advanced eSignatures, as well as to raise awareness on the importance of interoperability and cross-border recognition of eSignatures and the role of DSS in this regard.

3.3.2.5 Benefits and expected outcomes specific to the actions supported in 2018

An increased awareness and uptake of electronic signatures, in particular qualified electronic signatures, is expected thanks to the solutions provided under the Core Service Platform and the grants offered under the Generic Services.

As a core service, eID provides a platform to support and enhance the provision of eServices including the Generic Services within CEF. By facilitating the linkage of attributes, mandates and authorities to an eID, all these services receive the added value of being secure in the knowledge

of whom they are dealing with and the level of certainty attached to this and therefore supporting digital businesses.

3.3.2.6 Governance, operations and stakeholder involvement

With regard to the Core Service Platform, the Commission is in charge of the set-up, operation and maintenance work. Governance is provided through the Operational Management Board and the Architecture Management Board. Governance is also ensured by the eIDAS Expert Working Group and the CEF Telecoms Expert Group, Committee and eID Cooperation Network.

Two DSI technical sub-groups (one on eIdentification and one on eSignature) have been set up involving the relevant eIDAS expert group assisting the Commission in the implementation of the eIDAS Regulation. The aim of these groups is to discuss technical issues relating to the operation of Core Service Platforms for eID and eSignature services.

3.3.2.7 Type of financial support

The Core Service Platforms will be implemented through procurement contracts. Of the available budget, indicatively EUR 0.5 million is expected to be allocated to the eSignature Core Service Platform, and EUR 1.5 million is expected to be allocated to the eIdentification Core Service Platform.

Title:	eidentification and eSignature – Core Service Platform
Indicative total budget for 2018:	EUR 2 million
Type of financial support:	Procurement – Framework contract(s) (indicative number of contracts: 10 to 15 specific contracts)
Indicative duration of the action:	12 months
Indicative call publication date:	Q1 2018

Generic Services will be financed through grants. Of the available budget, indicatively EUR 0.5 million is expected to be allocated to eSignature proposals, EUR 7.5 million are expected to be allocated to eID proposals.

Title:	eidentification and eSignature – Generic Services
Indicative total budget for 2018:	EUR 8 million
Type of financial support:	grants – Call for proposals
Funding rate:	up to 75% of the total eligible cost
Consortium composition:	minimum of three organisations one or more eligible countries
Eligible organisations:	at least one should be a public service or acting on behalf of a public service
Indicative duration of the action:	18 months

Indicative call publication date:	Q1 2018
Indicative call closing date:	Q2 2018

3.4 Electronic delivery of documents – eDelivery

3.4.1 Background and rationale

3.4.1.1 The specific policy framework

Since 1 July 2016, the provisions set by eIDAS Regulation³⁰, to Electronic Registered Delivery Services (ERDS) apply directly in all 28 Member States. The eIDAS Regulation defines ERDS as a service that makes it possible to transmit data between third parties by electronic means and provides evidence relating to the handling of the transmitted data, including the proof of sending and receiving the data, and that protects transmitted data against the risk of loss, theft, damage or any unauthorised alterations. The eDelivery Building Block is aligned with eIDAS ERDS.

3.4.1.2 The contribution to the Digital Single Market

eDelivery is a key enabler for the completion of the Digital Single Market. With a legal framework in place, the eIDAS Regulation, the European Union has a predictable regulatory environment to enable secure and seamless electronic interactions between businesses, citizens and public authorities across borders. As the trends of intra-EU mobility and digitalisation of public services are steadily increasing, the advent of the ERDS and eDelivery will contribute to the creation of a Digital Single Market where people and business can trade, innovate and interact legally, safely, securely, and at an affordable cost, making their lives easier. Furthermore, by creating a common regulatory environment across Europe, new opportunities will open for both the public and private sector. For example:

- The public sector has further incentives to make public services available digitally through eDelivery as it enables the delivery of official documents (or sensitive information) with legal validity across borders. According to article 43 of the eIDAS Regulation, data sent and received using ERDS shall not be denied legal effect and admissibility as evidence in legal proceedings solely on the grounds that it is in an electronic form.
- The private sector will see new market opportunities for (Trust) Service Providers interested in offering pan-European eDelivery and software vendors will have an incentive to make messaging middleware compatible with it.

As shown above, there are many opportunities to tap into but, the uptake and use of the eDelivery DSI still needs to be promoted.

³⁰ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2014.257.01.0073.01.ENG

3.4.2 Implementation 2018

3.4.2.1 Baseline

Core Service Platform

The Core Service Platform of the eDelivery DSI offers technical specifications, sample software and managed services to public administrations, businesses and market players. The managed services consist in particular of testing services and technical support (training and deployment), as well as on boarding of pan-European projects and new software vendors.

Generic Services

The WP 2014 did not foresee Generic Services, as it only focused on the set up of the Core Service Platform for four years. Generic Services were funded in 2015 and 2016 to deploy Access Points (implementation of the AS4 messaging protocol according to the e-SENS Profile), while in 2016 the deployment of Service Metadata Publishers (SMPs which enable dynamic discovery of Access Points) was additionally supported. The upgrade of existing messaging solutions to support the technical specifications of CEF eDelivery was another objective of these Work Programmes. In the past, the AS2 protocol was also included but this is no longer the case since on 19 September 2016, the European Commission and OpenPEPPOL signed a Letter of Understanding, outlining the transition from the AS2 to the AS4 message exchange protocol within the PEPPOL eDelivery network.³¹

To sum up, the Generic Services have supported the deployment of Access Points and Service Metadata Publishers compliant with the technical specifications of CEF eDelivery. The grants have also been used for upgrading existing solutions to the specifications of CEF eDelivery.

3.4.2.2 Actions to be started in 2018

Core Service Platform

The requested funding will allow continuation of the service provision by the eDelivery Core Service Platform i.e. technical specifications, sample software of the different components, managed services such as the SML service, conformance testing services, supporting services including training and onboarding services and stakeholder management services.

Each service of the Core Service Platform is defined on the CEF Digital web portal:

<https://ec.europa.eu/cefdigital/wiki/x/qwvNAg>

Generic Services

To promote the uptake and speed up the use of the eDelivery technical specifications amongst both public and private entities established in the EU and EEA countries participating in the CEF Telecom programme, actions will be financed with the following objectives:

- a. deploying access points and, possibly, operating those access points for one year;
- b. deploying Service Metadata Publishers and, possibly, operating those Service Metadata Publishers for one year;

³¹ <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/2016/09/15/New+Agreement+between+the+European+Commission+and+OpenPEPPOL>

- c. upgrading data exchange solutions (such as Commercial Off-the-Shelf - COTS, Open-Source Software –OSS, and other) to support, and duly comply with, the CEF eDelivery standards.

The supported Generic Services should be aligned with the requirements set in the eIDAS Regulation to allow their use for the provisioning of ERDS services, including qualified ones. More generally the supported Generic Services should comply with the requirements set in relation to deployment and/or operation of access points within other sectorial European Regulations (e.g. eInvoicing, transport, environment, energy, health, public e-procurement, justice...).

The generic services will support the reuse of eDelivery also in services not qualified as CEF DSIs which may be in any policy sector and at any administrative level. This will lead to the set-up of a number of new Access Points and/ or SMPs and to the upgrade of a few additional data exchange solutions

3.4.2.3 Use of Building Blocks

The eDelivery DSI is a stand-alone Building Block , which is used by other DSIs. Where possible, the eDelivery DSI can be combined particularly with the eIdentification and eSignature Building Blocks in a sector specific context.

3.4.2.4 Benefits and expected outcomes

Research shows that projects reusing Building Block like solutions, such as eDelivery, may benefit from:

- 20 - 40% in cost savings by benefiting from common services and proven technology;
- 40 - 50% in performance gains by replicating the use of proven technology;
- Expertise pools, including the mobility of human resources across projects using eDelivery.

More specifically, the use of eDelivery contributes to the expansion of eIDAS ERDS and the use of secure encrypted communication among public administrations, businesses and citizens.

The new Access Points will allow more public administrations to exchange information (cross-border) in more policy domains. Currently, eDelivery is used in production in four policy domains (eProcurement, e-Justice, eHealth and Business Registers) in almost all Member States and associated countries. The uptake is ongoing in other DSIs/ policy domains including ODR, EESSI and several other initiatives.

3.4.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The eDelivery Building Block enables Pan-European projects to exchange electronic data and documents with each other in a secure, reliable and interoperable way. To ease its adoption in Europe, the Core Service Platform of CEF eDelivery offers a number of services at no cost. For example:

- **Open source sample software** of an AS4 Access Point, known as Domibus, offered according to the terms defined in its [Component Offering Description](#). There are three options available to the users of eDelivery. They can build and test their own

components according to the specifications of eDelivery, they can buy a commercial product that implements these specifications, or they can reuse the eDelivery sample software. Their users remain fully responsible for its integration with their backend systems and operation.

- **Training sessions** on eDelivery including the business and technical aspects associated to its implementation and use.
- **Connectivity testing** to test if a newly installed Access Point can successfully communicate with the Access Point hosted by the European Commission. If successful, these tests confirm that the new Access Point is in all likelihood correctly deployed and configured.
- **Conformance testing** to verify that an implementation of a CEF eDelivery component, either commercial or Open Source, conforms to the specifications of the CEF eDelivery Access Point.
- **Service Desk** provides user support on the overall CEF eDelivery service offering.

More information about the services of the Core Service Platform are available on the [CEF Digital website](#)³². Furthermore, the teams of the Core Service Platform of CEF eDelivery will continue to work on convergence and implementation projects in multiple domains such as eProcurement, eHealth, eJustice, Transport and Logistics, etc. Research³³ shows that reuse of Building Block like solutions such as eDelivery:

- Reduces costs through the use of common services and proven technology;
- Significantly shortens the time needed to develop a working online service;
- Promotes simplification as eDelivery can be used in multiple domains;
- Availability of multiple products, services and solutions from different vendors.

Furthermore, industry and software vendors will benefit from:

- Visibility of their services and software solutions;
- Be ahead of the curve by being involved in the deployment of technology supporting the development of the Digital Single Market;
- Technology aligned with the Electronic Registered Delivery Service (ERDS) referred to in the eIDAS Regulation on electronic identification and trust services for electronic transactions.

3.4.2.6 Governance, operations and stakeholders involvement

With regard to the Core Service Platform set up under WP 2014, the Commission is in charge of the set-up, operation and maintenance work. Member States play an active role in the implementation and deployment process, in particular to facilitate and accelerate the

³² <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/All+CEF+eDelivery+services>

³³ Gartner Research: The Advantages, Economics and Value of Reuse

widespread acceptance and use. Governance and operational management arrangements are in place and consist of representatives of the Member States and the Commission Cooperation with selected representatives from selected business sectors of services is foreseen. To this end, an extended DSI technical sub-group has been set up involving the eIDAS Expert Group assisting the Commission in the implementation of the eIDAS Regulation together with stakeholders' representatives (such as e-SENS, TOOP or Open PEPPOL). Its aim is to discuss technical issues relating to the operation of Core Service Platforms for eDelivery services.

3.4.2.7 Type of financial support

The Core Service Platform will continue to be implemented through procurement contracts.

Title:	eDelivery – Core Service Platform
Indicative total budget for 2018:	EUR 2 million
Type of financial support:	Procurement – Framework contract(s) (indicative number of contracts: 15 to 20 specific contracts)
Indicative duration of the action:	18 months
Indicative call publication date:	Q2 2018

The Generic Services will continue to be implemented through grants. Proposals may be submitted by consortia consisting of at least 2 public and/or private entities from one or more Member State(s) and/or EEA countries participating in the CEF Telecom programme.

Title:	eDelivery – Generic Services
Indicative total budget for 2018:	EUR 0.5 million
Type of financial support:	grants – Call for proposals
Funding rate:	up to 75% of the total eligible cost
Consortium composition:	minimum of two entities one or more eligible countries
Eligible organisations:	public and/or private entities
Indicative duration of the action:	18 months
Indicative call publication date:	Q2 2018
Indicative call closing date:	Q3 2018

3.5 Electronic invoicing – eInvoicing

3.5.1 Background and rationale

In recent years, the proliferation of eInvoicing standards and syntaxes coexisting in the Member States led to increased complexity in terms of cross-border interoperability. At the

same time, the take-up of electronic invoices in public administrations is still rather low despite the many benefits offered (savings, simplification, etc.).

3.5.1.1 The specific policy framework

As a consequence, Directive 2014/55/EU of the European Parliament and of the Council³⁴ (the eInvoicing Directive) was adopted in April 2014. The Directive calls for the definition of a common European standard (EN) for eInvoicing at the semantic level and of a limited list at the syntax level through additional standardisation deliverables which will enhance interoperability. Additionally, it mandates all contracting authorities and contracting entities to receive and process eInvoices complying with the European standard at the latest on 18 April 2019, for the central level, with a possibility of one year extension for the sub-central authorities, if a Member State decides so.

In support of the eInvoicing Directive, the Commission requested the drafting of the European standard for eInvoicing (EN) in public procurement by the European Committee for Standardisation (CEN). The European Standard was published by the European Commission on 17 October 2017.

3.5.1.2 The contribution to the Digital Single Market

The eInvoicing standard is an example of the important role that public procurement plays in promoting standards and interoperability. One European Standard for all EU suppliers when sending invoices to public administrations, especially in cross-border transactions, aims at achieving the Digital Single Market in public procurement.

The e-Government Action Plan 2016-2020 supports transition of Member States towards full e-procurement; in this context, eInvoicing, which is the last phase of e-procurement is key to successful achievement of this process (action 1 of Policy Priorities³⁵).

3.5.2 Implementation 2018

3.5.2.1 Baseline

Core Service Platform

For the CEF eInvoicing Building Block DSI, the WP 2014 provided the funding of the Core Service Platform until the end of 2017.

Under the Core Service Platform a set of activities has been financed:

- Support to the standardisation activities of the European Committee for Standardisation (CEN), in particular the standardisation process of the semantic data model;
- Support in the form of conformance testing, for implementers to make sure that their eInvoicing solutions/services correctly implement the syntaxes selected as supporting

³⁴ Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement (OJ L 133, 6.5.2014, p. 1).

³⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0179>

the eInvoicing standard. To this aim, a test infrastructure and services around it are offered to check the conformity of solutions/services;

- End January 2017 the eInvoicing Readiness Checker was made available. It is a service for Public Administrations to prepare for compliance with the eInvoicing Directive, by establishing partnerships with other European public administrations, as well as solution/service providers and systems integrators;
- Support to the interaction with the stakeholder community, in form of various stakeholder engagement activities and knowledge base of information in the eInvoicing domain. In this context, the eInvoicing part of the [CEF Digital portal](#) was launched end March 2016;
- Onsite and online training courses to build capacity of public administrations in adopting the eInvoicing standard and facilitate interoperability among contracting parties in Europe.
- Establishing of registers for CIUS/Extension specifications.

Generic Services

In 2015 and 2016 €14.5 million were awarded to actions for Generic Services. The financing of these projects allowed consortia of private and public stakeholders to prepare their solutions for the implementation of the final version of the Standard, mainly in countries with a high maturity of eInvoicing (good adoption rates in the public and the private sector, the existence of a competitive market for eInvoicing services and solutions, etc.). For some consortia members, it was the first implementation of eInvoicing solutions so that those beneficiaries could align to the general level of the eInvoicing situation in their country. Public administrations which received funding were therefore able to start using eInvoicing which is the final end of the European policy, by acquiring eInvoicing software or integrating an eInvoicing solution with their ERP (Entreprise Ressource Planning) systems. These IT modules need to be upgraded now with the alignment to the standard, but this can be done with a marginal cost to be borne by the former applicants in the consortia themselves.

The financing in 2017 targeted beneficiaries in countries with low levels of eInvoicing maturity.

3.5.2.2 New Actions in WP 2018

Core Service Platform

The funding will enable the continuity of the provision of the services of the eInvoicing Core Service Platform, meaning conformance testing, eInvoicing readiness checker, training courses, support services and stakeholder management services).

Each service of the Core Service Platform is defined in a Service Offering Document (SOD) and each component in a Component Offering Document (COD). More information about the eInvoicing service offering is available here:

<https://ec.europa.eu/cefdigital/wiki/x/GwFfAQ>

Generic Services

WP 2018 will provide support to promote the adoption of compliant eInvoicing solutions by public and private entities, which will facilitate the implementation of the European standard

on electronic invoicing and the set of ancillary standardisation deliverables, as mandated by the eInvoicing Directive.

With the publication of the European Standard in the Official Journal of the EU on 17 October 2017, the Member States enter into the implementation phase and therefore have the obligation of receiving and processing electronic invoices, even in countries where the uptake of e-Invoicing is less developed. The deadline for complying with this obligation at the national level is 18 April 2019. For the sub-national level, if a Member State decides so, they can extend the deadline to 18 April 2020.

In this context, a reinforced support is needed for Member States to ensure their compliance with the eInvoicing Directive. Three types of activities will be supported in the WP 2018:

- *Foster the uptake of eInvoicing solutions compliant with the European Standard:* public entities will be supported for putting in place eInvoicing solutions compliant with the European Standard and its ancillary deliverables;
- *Support the update of eInvoicing solutions compliant with the European Standard:* to ensure full compatibility of the existing solutions with the European Standard and its ancillary deliverables, solutions providers and public authorities will be supported for updating their eInvoicing solutions accordingly;
- *Integrate eDelivery services:* all proposals under this section are expected, for the purpose of document delivery, to either directly deploy the eDelivery Building Block , or use eDelivery through a service provider. If eDelivery is not deployed, the beneficiaries must prove the use of eDelivery services through a service provider for cross-border communication as the minimal accepted scope. The specific objectives of this activity are:
 - to deploy access points and/or to operate access points for one year;
 - to deploy Service Metadata Publishers and/or to operate Service Metadata Publishers for one year;
 - to upgrade data exchange solutions (Commercial Off-the-Shelf -COTS, Open-Source Software – OSS, and other) to support, and therefore comply with the CEF eDelivery standards

3.5.2.3 Use of Building Blocks

The e-Invoicing DSI is a stand-alone Building Block, which is used by other DSIs To support the exchange through one single European messaging infrastructure, solutions are encouraged to make use of the CEF eDelivery Building Block . The eDelivery Building Block can be combined with the eInvoicing Building Block as part of the Generic Service actions.

3.5.2.4 Benefits and expected outcomes

The expected outcome of the financed actions is to increase uptake and use of the CEF eInvoicing DSI by supporting authorities, especially regional and local authorities, in meeting the requirements of the eInvoicing Directive.

An additional benefit is to support solution/service providers to implement the EN into their solutions.

3.5.2.5 *Benefits and expected outcomes specific to the actions supported in 2018*

2018 is a critical year for the eInvoicing Directive. With the publication of the standard in October 2017, Member States have 18 months for full compliance with that Directive, i.e. April 2019. The financing through grants for 2018 should address cases of Member States with a lower level of maturity in eInvoicing. According to recent studies on the current state of e-invoicing in the EU, around half of the EU countries are still in this category³⁶ In some Member States, there is very little business-to-government eInvoicing. For these Member States EU support will help in the implementation of the European Standard for eInvoicing. it will also help in promoting the adoption of end-to-end e-procurement, which will ensure better (and more transparent) spending of EU money.

3.5.2.6 *Governance, operations and stakeholders involvement*

Member States are actively involved in the implementation and deployment process of the Core Service Platform with a view to ease and speed up widespread acceptance and use. At the same time, the European Commission is in charge of the operational management of the service. The European Multi-stakeholder Forum on eInvoicing (EMSF eI) is the advisory body to the Commission for this CEF DSI. Its mandate was renewed in June 2017.

3.5.2.7 *Type of financial support*

Title:	eInvoicing – Core Service Platform
Indicative total budget for 2018:	EUR 0.8 million
Type of financial support:	Procurement – Framework contract(s) (indicative number of contracts: 1 to 10 specific contracts)
Indicative duration of the action:	18 months
Indicative call publication date:	Q1 2018

Generic Services will be financed through grants. Proposals may be submitted by consortia consisting of at least 2 entities from one or several Member States or EEA countries participating in the CEF Telecom programme, which support one of the actions mentioned above. The first activity – *Uptake of eInvoicing solutions*-is targeting local and regional public contracting authorities. The second - *Update of eInvoicing solutions*- targets solution providers and procuring authorities who are already using eInvoicing solutions. For the third activity - Integration of eDelivery services - there will be support only if integrated in a proposal for one of the other activities.

Title:	eInvoicing - Generic Services
Indicative total budget for 2018:	EUR 5 million
Type of financial support:	Grants

³⁶ 2016 Study on the 'State of play of B2G eInvoicing in public procurement' <https://ec.europa.eu/cefdigital/wiki/pages/viewpage.action?pageId=46992476>

July 2017, Study on the practical application and implementation of the European e-Invoicing standard, PWC, to be published

Funding rate:	75% for cost reimbursement
Consortium composition:	minimum of two organisations one or several eligible countries
Eligible organisations:	any
Indicative duration of the action:	18 months
Indicative call publication date:	Q2 2018
Indicative call closing date:	Q3 2018

3.6 Access to re-usable public sector information – Public Open Data

3.6.1 Background and rationale

3.6.1.1 *The specific policy framework*

Improved access to public sector information is an essential component of the EU strategy for stimulating new business opportunities and research and addressing societal challenges. There is great potential for re-using this public-sector information within countries, across borders, and between sectors. This potential is, with a huge but still underexploited. Open data portals exist at national, local and sometimes sectorial or domain-related levels (e.g. for environmental data, spatial information, etc.). However, cross-border and cross-sectorial synergies can only be achieved through the deployment of infrastructure at EU level. This infrastructure implements one of the key actions included in the Commission communication on Open Data³⁷. It also advances the goals of Directive 2003/98/EC³⁸ (modified by Directive 2013/37/EU³⁹) on the re-use of public sector information (PSI Directive), now transposed by Member States.

The Communication "Building a European Data Economy"⁴⁰ of 10 January 2017 argues that Europe is not making full use of the potential of data for business, research and innovation purposes. It calls for technical solutions for reliable identification and exchange of data. The Staff Working Document accompanying the Communication then discussed Industrial Data Platforms as a concrete example of a data marketplace that can stimulate data sharing in commercial contexts. For access to and re-use of data, data platforms can enable data sharing, ensuring that data users have access to the data they need in the form that is most useful to them.

In addition, public authorities need access to data for public-interest and scientific purposes. Access to this kind of data (for example enabling statisticians to analyse business data, or optimising traffic management systems on the basis of real-time data from private vehicles)

³⁷ COM(2011)882 of December 2011. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52011DC0882>

³⁸ Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information (OJ L 175, 27.6.2013, p. 1)

³⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013L0037>

⁴⁰ COM(2017) 9 final. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2017:9:FIN>

would help the public sector work better. Given that the public sector needs data to operate more efficiently, Member States would benefit from access to HPC-enabled services to treat this data.

3.6.1.2 The contribution to the Digital Single Market

Section 4.1 (Building a data economy) of the Communication 'A Digital Single Market Strategy for Europe'⁴¹ states that the Commission 'will encourage access to public data to help drive innovation'. This refers in particular to 'open data', i.e. data that is made freely available for re-use to everyone for both commercial and non-commercial purposes. The public open data DSI is an indispensable tool for achieving this goal. The growing importance of 'big data' analytics, and more powerful tools to extract meaning from data, have given public authorities the opportunity to be part of the data-driven economy. The overall objective of the DSI is to help boost the development of information products and services based on the re-use and combination of data held by public and commercial actors across the EU. It also aims to promote the availability of good-quality, reliable and interoperable datasets, and foster the development of data portal infrastructure to allow the full potential of data to be exploited.

This DSI also contributes to the Digital Single Market priority of an inclusive e-society, in particular by helping to promote cross-border interoperability and facilitate interaction with the public. Finally, by implementing a standard metadata model for the portal catalogue (as well as commonly used open-source software components for its architecture) the DSI supports the Digital Single Market objective of boosting competitiveness through interoperability and standardisation.

The Digital Single Market strategy outlined a set of concrete actions to address existing barriers to the free flow of data across borders and sectors. Data sharing platforms are important tools for improved access to data, which is one of the main objectives of the Communication "Building a European Data Economy". Public sector bodies could improve their decision making by an easier access to commercially-held information. This would be especially useful for public health policy, spatial and urban planning, natural and technological risk management, management of energy supply grids and environmental protection. Access to and the ability to combine data from different sources is also critical for scientific research in fields such as the medical, social and environmental sciences.

The European Cloud Initiative proposed in the April 2016 Communication "European Cloud Initiative - Building a competitive data and knowledge economy in Europe" is a key component of the Digital Single Market as one of the measures in the Commission's strategy for Digitising European industry. The Cloud initiative aims to give Europe a lead in the global data-driven economy, fostering innovation and improving competitiveness by using technologies such as HPC and 'big data' to process, manage and store the large volumes of information generated by the data revolution. The European Cloud Initiative calls for the creation of a HPC-empowered European Data Infrastructure and for broadening the user base of this infrastructure to industry and the public sector to achieve a European dimension.

The mid-term review of the Digital Single Market strategy adopted on 10 May 2017 that reiterated the importance of HPC for the digitisation of European industry and the data economy. In the review, the Commission confirmed its commitment to invest in upgrading

⁴¹ COM(2015) 192 final. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192>

European computing and data infrastructure to exascale capacities, and also announced its intention to explore how to set up a new framework for the development and procurement of a world-class pan-European HPC and data infrastructure.

3.6.2 Implementation 2018

3.6.2.1 Baseline

Core Service Platform

The initial part of the Core Service Platform has been deployed through the development of the European Data Portal (<http://data.europa.eu/europeandataportal>). Operational since November 2015, the portal has been harvesting the metadata of Public Sector Information made available by public data portals across Europe. Currently the portal contains references to around 600000 datasets from 70 national catalogues in 34 countries. It is also harvesting the metadata of European Union Institutions and bodies disseminated via the EU Open Data Portal.

On 1 March 2017, Version 2.0 of the European Data Portal was made available in all 24 EU languages and metadata was translated from/to all of them.

Activities supporting data production and data take-up have also taken place. In particular, they include the release of training material, and guidelines for data producers. They also include studies on Creating Value through Open Data and on Open Data Maturity in Europe⁴². The software code of the portal and all its modules has been made freely available as Open Source Software since the release of Version 1.

An open call for tenders implementing WP 2017 was launched on 22 July 2017 to continue the platform activities for the period 2018-2020.

Generic Services

The first call for proposals in WP2015 covered the harmonisation of cross-border/cross-sector metadata and/or data by participating cities, national regulatory authorities, NGOs and private actors. This call led to two actions that started in the final quarter of 2016. A second call for proposals in WP2016 targeted the re-use of datasets from several priority sectors generated by different authorities across borders, while addressing both technical and legal issues and focusing on metadata/data production and maintenance. Five actions that addressed different sectors (including the environment and geospatial information) began activities in the first half of 2017.

Following the call in 2017 for generic services, HPC-related actions in 2018 will address the need for services providing access to HPC, storage and data management facilities. The goal is to increase the HPC and data capacities of the European Data Infrastructure, and to promote the use of HPC and data across borders in the public interest.

3.6.2.2 New Actions in WP 2018

In 2018, the actions under this DSI will be broadened in order to reflect the need to:

⁴² <https://www.europeandataportal.eu/en/what-we-do/factsheets-and-reports>

- handle large volumes of dynamic data in the future (e.g. coming from satellites);
- enable public sector bodies to benefit from large-scale data analytics;
- gather tools and knowledge and provide practical support for sharing of public sector data and data held by private companies in areas of public interest, and facilitate the combination of the relevant data with open government data.

This will considerably increase the capacity of the platform to bring out the potential of the European data economy.

Core Service Platform

In addition to the functions currently provided by the European Data Portal, new functions will therefore be added to the core service platform. The additions will be implemented by adding to this DSI two new functionalities and a support centre for data sharing. These two new functionalities and the support centre are discussed in more detail below:

1) A cloud-based test infrastructure for the sharing and analysis of ‘big data’ – a CEF Building Block .

The addition of this re-usable element will enable the Core Service Platform to offer an open, cross-sectoral (horizontal) data platform for the exchange of public data and commercially-held data of public interest (on transport, the environment, etc.). It will also enable experimentation with data analytics tools and technologies. Its functionalities will be available to public sector entities, who may also involve private sector actors willing to respect the common rules. This will ensure access and interoperability, contribute to the standardisation of data transfer processes and offer common governance rules. Public sector data will be used and shared on the platform, through the connection with the European Data Portal. Real-time data will also be shared on the infrastructure through the FIWARE Context Broker (see paragraph below), together with privately held data of public interest provided by the participating private actors (for which the DSI will serve as a clearing house). Tools are needed to help analyse this vast amount of information. For this reason, the platform will offer tools to facilitate the launch of pilot projects on (big) data and data analytics, by providing a cloud-based infrastructure and the software tools needed to combine and analyse the available datasets and visualise the results (for example data mining and text mining tools and data visualisation tools). It will also offer built-in APIs for data ingestion from different data sources.

2) The FIWARE Context Broker for enabling the European Data Portal and the Member States to collect and use real-time data – a CEF Building Block

The addition of this re-usable element will mean adding new data sources to the Core Service Platform, including the FIWARE Context Broker for real-time data sharing. The Context Broker was developed as one of the core components of the FIWARE platform, which was partially funded by the European Commission under the Future Internet PPP Programme. Following a structured assessment of several candidate Building Blocks with the Member States, it was concluded that the FIWARE Context Broker is mature and fits the programme scope. It has a stable set of specifications, a reference implementation that has been tried and tested in several contexts, and it already benefits from a strong user community. The FIWARE Context Broker provides an open API specification and a conformant reference implementation (Orion) for collecting, managing and sharing (real-time) context information (a cornerstone for any Smart Solution/App). The platform will

also include a sandbox environment for public authorities to test the use of real-time data. The actions covered under WP 2018 aim to further promote the reuse of the FIWARE Context Broker specifications and reference implementation in (public sector) solutions. The European Data Portal will also benefit from the Context Brokers in use across Europe. In short, the Portal will implement the required APIs to consume and make use of the data harvested by the Brokers. The Core Service Platform will also upgrade its support function (helpdesk and training) to include real-time data in addition to static (open) data sets.

3) Support Centre for data sharing

Finally, the Core Service Platform will include a Support Centre for data sharing, to support the knowledge exchange between all actors in the data economy. It will provide practical advice, best practices and methodologies for data sharing and data analytics. For example, the platform will give access to model contract clauses tested in previous data transactions and backed by public authorities. The Support Centre will also publish good practices for technical tools such as APIs, and advise on other practical and legal questions. This will also help public authorities find and disseminate the most recent information on data sharing, so they can determine the right level of support or intervention. The Centre's services will also be available to public authorities wishing to exchange data with other public authorities. It could also assist the Commission in developing model contract clauses. The Centre will take into account the work already carried out under the ISA² programme and it will draw on experience from the functioning of the data sharing platform and the FIWARE Context Broker (see the two above paragraphs).

Generic Services

Proposals must address one of the following topics:

- 1) Support for the re-use of information made discoverable/available through the European Data Portal. Where appropriate, this re-use should occur in combination with other sources of information, through solutions focused on the end-user (mobile device applications, websites, web services). These solutions will support the deployment of new services in innovation ecosystems supported by open platforms, in sectors that are becoming large and important. Proposals should include a plan for an EU-wide assessment model demonstrating the impacts of the re-used open data. The aim here is to provide a toolkit for national administrations. The toolkit would contain standard procedures and software solutions which might include the processing of open data. The toolkit would also include harmonised questionnaires, key indicators, etc. This toolkit would facilitate ex-post evaluation of the economic and social impacts of the re-use of public-sector information in Europe.
- 2) The generation of cross-border services providing access (view and download) to harmonised thematic open dataset(s) and the corresponding metadata. These services can be based on different data sources, including e.g. geospatial data provided under INSPIRE, Copernicus data, EGNOS/Galileo positioning & navigation information, data provided by citizens and crowd-sourced initiatives such as OpenStreetMap. The services shall be harmonised in terms of data content, level of detail, data structure, vocabularies and licence conditions and shall have pan-European or at least cross-border (a minimum of five Member States) geographical coverage. The view and

download services will have to be made available through the European Data Portal and documented through metadata in the appropriate harvested catalogues. They will provide value-added information to support specific application areas in priority EU policies, e.g. in the areas of energy, climate, protection of the environment, sustainable use of natural resources, emergency/disaster management. Proposals should demonstrate the policy-relevance and include a plan for long-term sustainability of the created services. They should also document barriers encountered during the creation of the services and make recommendations for tools, functionalities or good practices that could facilitate the creation of such services on a larger scale or for other application areas.

- 3) The creation of new access services to increase the HPC and data capacities of the European Data Infrastructure. This will also include cross-border use of HPC and data capacities for public interest: collecting, storing and managing large (public or private) data sets of cross-European interest, and developing and offering HPC-based services and tools for enabling their scalable exploitation and use. Proposed actions may target the provisioning of HPC and data resources (including if necessary the procurement of dedicated storage and data management infrastructures) and cloud-based services to access such facilities and to process the data for current and future applications. Actions will have to justify and demonstrate the value of using supercomputing resources to analyse and process massive amounts of research and engineering open data resources. The new generic access services called for will increase the usability of HPC, storage and data management facilities, laying out the basis for building a new generation of HPC and data-powered cross-border and intelligent services for a wide range of users, including researchers, industry, and the public sector. Expected beneficiaries are large (public or private) data generators and data providers (e.g. from the health, space, environment, energy, transport or climate change sectors and smart cities, etc.). Other beneficiaries include infrastructure providers that give access to data and supercomputing resources (such as GEANT and supercomputing centres), and other private or public entities developing cloud-based access services. Actions involving the provision of specific public services must ensure that the data and associated metadata that is generated conforms and is interoperable with the relevant standards. These standards include the standards for seamless upload onto the European Data Portal or national/sector-related open-data portals.

3.6.2.3 Use of Building Blocks

The translation of static content, as well as the real-time translation of dynamic content (such as search specification, search results, metadata records, etc.), will make use of the services provided by the automated translation building block wherever possible. The current version of the core service platform of the European Data Portal will progressively integrate all the Automated Translation building block capabilities (e.g. instantaneous translation, use of subject-specific translation capabilities) as soon as they become available.

The voluntary authentication of user identities to provide personalised value-added services (e.g. query-search storage, identified provision of feedback and request for support, etc.) and access Member State resources for which an identification is required will make use of the eIdentification building block, whenever possible. This voluntary authentication will also make use of EU-Login and national eIDs wherever possible.

3.6.2.4 Benefits and expected outcomes

The improved availability of harmonised content at EU level makes it easier to re-use this content across borders and across sectors. The private sector will benefit through the development of value-added services. The public sector will benefit through the combination of public data and supercomputing, while public authorities at all levels of government, including cities, will benefit through the streamlining of the production of interoperable content and its re-use. The public will benefit through increased transparency and availability of innovative services, and through an expected increase in the efficiency of public services. Ecosystems of start-ups can strongly benefit from open data, and entrepreneurs can use open platforms to develop apps with high social and economic impact.

The Commission expects this DSI to have a significant long-term impact on the development of the Digital Single Market for innovative ICT-based services. High value sectors such as geo-location, tourism, transportation, education, marketing and decision support systems will benefit from more abundant, cross-border availability of public open data.

More specifically, the data platform will lower data transaction costs by offering the right technical environment and practical advice. It will also reduce the costs of negotiating appropriate contracts (licensing agreements). In line with the Digital Single Market strategy and the CEF objectives, this DSI will promote smart, sustainable growth and improve the EU's global competitiveness by developing modern and high-performing trans-European data exchange networks. It will foster online cross-border data flows and encourage investment in data assets. Although they are primarily a technical tool, data platforms can also help overcome barriers of a non-technical nature: by dispelling concerns about losing control over one's data, linking only with trustworthy certified partners, ensuring well-defined joint access to certain data. The Support Centre for data sharing will further facilitate data transactions. By making use of synergies across the sectors, European businesses will profit and the public will indirectly benefit as well. The European added value of the DSI is crucial, since scale is important to the attractiveness of data platforms.

The increasing use of HPC technologies and Big Data will support Europe in taking a lead in the global data-driven economy. It will help foster innovation and improve innovation and competitiveness by using critical technologies like HPC and Big Data to process, manage and store the large volumes of information generated by the data revolution. In particular, the strengthening of the HPC and data capacities of the European Data Infrastructure will facilitate the creation of future services in areas of common interest of the Member States, for example (but not limited to) HPC-empowered platforms with data analytics tools capable of analysing the wealth of open data available and supporting decision-making.

3.6.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The activities launched in 2018 will help broaden the user base of the European Data Infrastructure by improving the capacities and access services made available to European science, industry and public authorities. They will also provide users with the means to make use of the increasing data and computing power available, and create solutions that benefit the economy and society. In addition, the activities will showcase the added value of harmonised cross-border services in priority EU policy areas, and identify remaining barriers to creating such cross-border services from existing open datasets (with datasets from the public and private sector as well as the public).

3.6.2.6 *Governance, operations and stakeholders involvement*

Member States are involved in the European Data Portal through the Public Sector Information group and its subgroup on open data portals (both the group and the sub-group being composed of representatives of Member States and relevant Commission services). The process of creating a long term governance model will be linked to the parallel definition of the business model required to guarantee the sustainability of the Public Open Data Core Service Platform. The appropriate links will also be established with other possible contributing Building Blocks as the CEF programme evolves.

In addition, the subgroup on data analytics in public administrations established under the eGov Steering Board and appropriate contributions from actions supported by the ISA² programme could be integrated over time. New stakeholders such as the FIWARE foundation could also be included.

3.6.2.7 *Type of financial support*

The Core Service Platforms will be implemented with procurement contracts, awarded through open procedure or appropriate framework contracts. Of the available budget, EUR 4 million is expected to be allocated to include an open, cross-sectoral (horizontal) data platform for sharing public data and commercially-held data of public interest and experimentation with data analytics tools and technologies, EUR 3 million is expected to be allocated to the extension to the Context Broker for real-time data sharing and EUR 1.5 million is expected to be allocated to the Support Centre for data sharing.

Title:	Access to re-usable public sector information – Sharing and using data in areas of public interest - Core Service Platform
Indicative total budget for 2018:	European Data Portal: none Data Sharing Platform: EUR 4 million Context Broker: EUR 3 million Support Centre for data sharing: EUR 1.5 million
Type of financial support:	Procurement –Open call for the Support Centre for data sharing (one contract) and through three existing framework contracts (indicative number) for the other two functionalities.
Indicative duration of the action:	Up to 36 months
Indicative call publication date:	Q2 2018

Generic Services will be financed through grants. Of the available budget, EUR 2 million is expected to be allocated to support the re-use of information made discoverable/available through the European Data Portal (objective 1). EUR 1.5 million is expected to be allocated to support the generation of cross-border services providing access to harmonised geospatial open dataset(s) and the corresponding metadata based on different data sources, including e.g. INSPIRE and Copernicus data (objective 2). EUR 15 million is expected to be allocated to

new access services for increasing the HPC and data capacities of the European Data Infrastructure and their cross-border exploitation for public interest (objective 3).

Title:	Access to re-usable public sector information – Sharing and using data in areas of public interest - Generic Services
Indicative total budget for 2018:	EUR 2 million for objective 1 EUR 1.5 million for objective 2 EUR 15 million for objective 3
Type of financial support:	Grants – Call for proposals
Funding rate:	Up to 75% of the total eligible costs
Consortium composition:	Objective 1: A minimum of two entities from two or more eligible countries Objective 2: A minimum of five entities from five or more eligible countries . Objective 3: One or more organisations from one or more eligible countries
Eligible organisations:	any
Indicative duration of the action:	36 months
Indicative call publication date:	Q2 2018
Indicative call closing date:	Q3 2018

3.7 Automated Translation

3.7.1 Background and rationale

The purpose of the Automated Translation Building Block is to provide multilingual support to the other pan-European DSIs so that individuals, administrations and companies in all EU Member States and EEA countries participating in the CEF Telecom Programme can use public services in their own language. The building block offers automated translation services to public administrations to facilitate cross-border information exchange.

3.7.1.1 The specific policy framework

Multilingualism is one of the greatest assets of cultural diversity in Europe and, at the same time, one of the most substantial challenges for the creation of a truly integrated EU. The protection of the EU's linguistic diversity is anchored both in the European Charter of Fundamental Rights and in the Treaty on the European Union, which also recognises the equality of all EU official languages.

Linguistic barriers in the online world can be addressed by the innovative implementation of Natural Language Processing tools (NLP) such as machine translation. Specifically, CEF Automated Translation will provide DSIs with access to its machine translation service, eTranslation, for any pair of official languages of the CEF countries (including Icelandic and Norwegian) via a web user interface and API, to foster operation of pan-European digital

services in a multilingual environment. eTranslation will be customised to serve specific sectors such as law, health, culture, etc.

3.7.1.2 The contribution to the Digital Single Market

Automated Translation will contribute to the Digital Single Market by making it possible for people, businesses and administrations to communicate across the language barrier. This will help worker mobility, and make it easier to do business across borders, buy products online from other countries, learn about peoples'/consumers' rights in other countries or languages or resolve cross-border problems and disputes.

3.7.2 Implementation 2018

3.7.2.1 Baseline

Core Service Platform

By early 2018 the actions from previous Work Programmes will have completed the coordination and networking efforts between Member States for collecting language resources and a sound governance of the Automated Translation Building Block will be in place.

By this time a common repository for language resources and processing tools will have been set up. It will contain a growing amount of language resources and tools to train automated translation systems.

Version 1.0 of the eTranslation machine translation service will have been launched by Q4 of 2017 and will be available for machine-to-machine use and through a web-user interface. Work on the automated adaptation facility will have progressed to the level that adapted engines can be built from domain-specific datasets basically without human intervention by the time the WP 2018 actions will start.

Generic Services

The collaborative projects for generic services resulting from the WP 2016 call will be operational. "Language resource" projects will start delivering language resources. CEF eTranslation service will be integrated into a number of public online services.

3.7.2.2 New Actions in WP 2018

The main objectives of the actions planned in 2018 are:

- to continue operating the core service platform and to complete and operate the automated adaptation facility based on the results of the previous work programmes. The core service platform will be further enhanced by the introduction of new processing tools and services.
- to continue language resource collection for specific domains and to stimulate the porting and integration of the eTranslation service to online systems requiring multilingual functionality via Generic Services.

Core service platform

Procurement will be used to purchase machine translation systems and/or services, language processing components and/or services, and processing capacity (e.g. cloud services) for the needs of the growing core service platform. It will also cover the emerging needs for system

maintenance, configuration, adaptation and integration of the automated translation services into external digital services. The actions in WP2018 will continue to support stakeholder management activities and ensure that relevant content is available through the [CEF Digital Single web portal](#).

Generic Services

Two types of collaborative projects will complement and extend the coverage of generic services arising from the WP2016 and WP2017:

- **Collaborative language resource projects** to make language resource provision to CEF Automated Translation easier. This will include identification, processing (anonymization, aggregation, alignment, conversion, etc.) and collecting language resources in the Member States. Priority will be given to resources in those languages for which there is not enough data available to offer good quality eTranslation services. Priority will also be given to resources in the domains relevant for the DSIs, taking into account the demand for addressing the specific language or DSI. Generic resources may also be targeted to improve the overall quality of eTranslation for a broader set of text styles and to extend its lexical coverage.
- **Integration projects** to make online services multilingual with existing technology, working on real systems (CEF DSIs and/or national online services and portals related to CEF services). The projects are expected to use the CEF eTranslation service (alone or in combination with other/commercial tools and services). Priority will be given to proposals applying mature cutting-edge language technologies other than machine translation (e.g. for interactive translation, semantic interoperability). These integration projects are expected to become fully functional and integrated in the relevant services within the duration of the project.

3.7.2.3 Use of Building Blocks

Automated Translation is a Building Block which provides services to other DSIs. Where appropriate, eDelivery will be used for the secure handling and transmission of confidential content to and from eTranslation service. If necessary, it will also be used for secure transmission of language resources for the Automated Translation building block. The eTranslation service uses EU-Login for user authentication and therefore indirectly integrates the e-ID Building Block. The inclusion of eDelivery is encouraged for generic service actions, where appropriate.

3.7.2.4 Benefits and expected outcomes

The expected benefits are three-fold: i) helping achieve the Digital Single Market by lowering language barriers; ii) rolling pan-European DSIs out effectively and achieving wider acceptance of them; iii) boosting the response capacity and efficiency of public sector translation services, and increasing security.

3.7.2.5 Benefits and expected outcomes specific to the actions supported in 2018

Automated Translation currently provides generic machine translation services to and from all EU official languages. Three DSIs (the European Data Portal, Open Dispute Resolution and European e-Justice Portal) are already connected to the service, while EESSI and e-Procurement have committed to use eTranslation.

As for the Core Service Platform, the operations will continue, the domain adaptation facility will be completed, and new components will be added. Such components could be, for example, commercial machine translation software for 'difficult' languages where translation quality is not sufficient with the technology used in eTranslatio, or processing modules to implement linguistic and semantic interoperability for CEF DSIs.

The generic services will continue to deepen the involvement of Member States in language resources detection, collection and processing. In addition they will result in mature and fully functional reference implementations in areas related to CEF DSIs. They will also result in the integration of automated translation technology with real, existing public online services.

3.7.2.6 Governance, operations and stakeholders involvement

Member States will be actively involved in the implementation and deployment process. They are also invited to contribute to the collection of language resources in order to improve the quality of automated translation services for their respective languages. The Commission services will be in charge of the operational management.

The Language Resource Board, set up under the previous work programmes, is the DSI expert group. It includes representatives from national language competence centres and from stakeholder groups representing existing language resource repositories and the leading users of the relevant DSIs (including Member State administrations). This governance body will be extended to include appropriate representatives of the language industry and language technology experts. Relevant stakeholders from the generic services projects will be involved.

In the course of 2018, the network of stakeholders and contributors of language resources in all EU Member States and in the countries participating in the CEF programme will be broadened to effectively involve important players beyond the public sector, for example commercial providers, non-profit organisations, and professional organisations in the areas relevant to the DSIs.

3.7.2.7 Type of financial support

The core service platform will be implemented through procurement contracts.

Title:	CEF Automated Translation – core service platform
Indicative total budget for 2018:	EUR 3.5 million
Type of financial support:	Procurement – Framework contract(s) (indicative number of contracts: 1 to 2)
Indicative duration of the action:	Up to 36 months
Indicative call publication date:	various in 2018

Generic services will be financed through grants. Proposals may be submitted by consortia composed of a minimum of two organisations (public or private entities) based in two different Member States and/or EEA countries participating in the CEF Telecom programme. Proposals shall address at least two different EU/CEF languages. eDelivery deployment can be part of the proposal.

Title:	CEF Automated Translation –generic services
Indicative total budget for 2018:	EUR 5 million
Type of financial support:	Grants – Call for proposals
Funding rate:	up to 75% of the total eligible costs
Consortium composition:	minimum of two organisations from two or more eligible countries
Eligible organisations:	Public or private
Indicative duration of the action:	24 months
Indicative call publication date:	Q2 2018
Indicative call closing date:	Q3 2018

3.8 Critical digital infrastructures support – Cybersecurity

3.8.1 Background and rationale

Cybersecurity is a challenge shared by all Member States. Efficient and timely cooperation between public and private stakeholders in and between Member States about risks, vulnerabilities, threats and above all incidents is crucial for providing high levels of cybersecurity in Europe. Incidents arising from system failures and cyber-attacks not only undermine the resilience of digital infrastructure, they subvert the delivery of digital services. Europe is only as strong as its weakest link and not all Member States, encompassing their operators of critical infrastructure, are considered to have appropriate capabilities for responding to cybersecurity challenges which undermine trust and confidence in the Digital Single Market.

The Cybersecurity DSI provides the enabling infrastructure so that capabilities for operational co-operation exist in the Member States and that secure information exchange can take place. This applies to voluntary operational co-operation, advice and support repositories and assistance for more rigorous and cost effective security certification.

The overall objective of this Building Block DSI is the establishment and deployment of a core cooperation platform of cooperation mechanisms initially focused on Computer Security Incident Response Teams⁴³ (CSIRTs) in accordance with Directive 2016/1148⁴⁴. The resourcing and upskilling of CSIRTs in the Member States coupled with the establishment of a platform for secure information exchange will enable operational cooperation for the CSIRT Network under this Directive. This Core Service Platform will be further developed to include infrastructure to support Information Sharing and Analysis Centres (ISACs), repositories and tools for awareness raising and training along with facilities to support security certification of digital products and services.

⁴³ Alternatively known as Computer Emergency Response Teams (CERTs)

⁴⁴ Directive (EU) 2016/1148 of the European Parliament and the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union, i.e. "the NIS Directive", see http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=uriserv:OJ.L_.2016.194.01.0001.01.ENG

3.8.1.1 The specific policy framework

The cybersecurity measures announced in the Joint Communication "*Resilience, Deterrence and Defence: Building strong cybersecurity for the EU*" are focused on urgently upscaling the level of supports to address the near exponential growth in cyber attacks. This involves a strengthening of the European Agency for Network and Information Security's (ENISA) mandate as the NIS Directive takes effect in the Member States, a blueprint for a co-ordinated response in response to a large scale cyber incident and an EU wide certification framework to facilitate enhanced security of ICT products and services. It includes guidance on the implementation of the NIS Directive which takes effect in the Member States from May 2018. It requires Member States to have an appropriate minimal set of capabilities at regulatory and operational levels, involving resourced national competent authorities and CSIRTs. Furthermore EU co-ordination is now formally structured at both strategic and operational levels, involving a network of CSIRTs to facilitate information exchange. The Directive also requires particular industrial operators, namely those running critical information infrastructure and delivering particular digital services to have security requirements and to report serious incidents.

Many technical and organisational aspects of the DSI have already been addressed with CSIRTs developing their own bespoke open source tools, for example the Malware Information Sharing Platform (MISP). In addition these are underpinned by the development of Information Sharing and Analysis Centers (ISACs) in the finance and energy sectors and the role of ENISA in acting as a locus of expertise and good practises.

Specific ISACs are needed in the area of cooperative, connected and automated mobility (CCAM). Member States plus Norway and Switzerland signed on March 2017 a Letter of Intent committing to work together on large scale testing and demonstration. In September 2017 a set of cross-border corridors were agreed.

3.8.1.2 The contribution to the Digital Single Market

The recent Digital Single Market Mid-Term Review⁴⁵ highlighted the importance of investing in a cyber secure environment for enabling the digital economy and society. Cybersecurity incidents, be they intentional or accidental, can disrupt the supply of essential services which citizens take for granted such as water or electricity. A high level of cybersecurity is an essential element of a well-functioning Digital Single Market.

The NIS Directive⁴⁶ seeks to ensure a minimum baseline level of cybersecurity capabilities in the Member States and facilitate enhanced co-operation. Operators of essential services and digital service providers active in the Digital Single Market must meet security requirements and report serious incidents. Furthermore in today's world of omnipresent connectivity with connected objects and the Internet of Things, the proposed new EU wide certification framework involving ENISA, will facilitate enhanced security of ICT products and services to enable increased confidence and trust in use of and reliance on them.

⁴⁵ COM(2017)228

⁴⁶ Directive (EU) 2016/1148 of the European Parliament and the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union, i.e. "the NIS Directive", see http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=uriserv:OJ.L_.2016.194.01.0001.01.ENG

3.8.2 Implementation 2018

3.8.2.1 Baseline

Core Service Platform

The actions of WP 2015 had the objective to set up, launch, maintain and operate a cooperation mechanism between a group of national and/or governmental CSIRTs. This was in line with the governance structure and requirements established under the WP 2014, in order to collect, analyse and share knowledge about cybersecurity matters. This co-operation mechanism is under development.

Generic Services

The actions under the WP 2016 and WP 2017 aim at enabling Member States to develop their national and/or governmental CSIRTs local capacities. These are necessary for the interoperability of their own capabilities with the cooperation mechanism established within WP 2015.

3.8.2.2 New Actions in WP 2018

Core Service Platform

The Core Service Platform for the Cybersecurity DSI will consist of a series of co-operation mechanisms to facilitate data exchange not only among CSIRTs, but also industry sectoral ISACs and reporting and coordination requirements under the NIS Directive. Further work on co-operation mechanisms will be undertaken to address information exchange and resource assistance requirements for Cybersecurity stakeholders other than national/governmental CSIRTs (i.e. including national competent authorities, Operators of Essential Services (OES), Digital Service Providers (DSPs) etc). In particular this may involve a reporting and co-ordination mechanism with national competent authorities and any necessary adaptations to facilitate use of the existing co-operation mechanism after deployment. Deployment work on the existing co-operation mechanism will continue as planned and financed by previous Work Programmes.

Initiatives may also include improving situational awareness with industry stakeholders through the resourcing of voluntary sectoral ISACs, the upgrading of crisis management mechanisms to accommodate large scale cyber incidents, development of repositories of best practises and the enabling of access to and analysis of near real-time threat information in conjunction with various stakeholders (i.e. ISACs, CSIRTs, OES, DSPs).

Specific ISACs in support of Co-operative Connected and Automated Mobility will be deployed, in particular for electric vehicles.. This will consist of cross border industry based platforms involving operators of essential services in the energy and transport sectors as referenced in the NIS Directive. This could be done in cooperation with CEF Transport and CEF Energy.

Generic Services

The actions under the WP 2018 build upon those in the WP 2016 and WP 2017, which were focused on CSIRT capability development. In addition to CSIRTs, they will also include other Cybersecurity stakeholders such as national competent authorities, operators of essential services, digital service providers, industry involvement in sectoral ISACs (at European and

national levels) and test houses. In particular, national level information exchanges and national level ISACs involving operators of essential services and digital service providers that involve CSIRTs or national competent authorities for secure information exchange of cybersecurity risks, threats, vulnerabilities and incidents can be supported through Generic Services.

These Generic Services may include the acquisition and operation of national level cybersecurity IT systems, experimental test-beds including infrastructure for cyber ranges, training facilities, product security testing and certification equipment, self-assessment security and reporting toolkits, joint training courses, "capture the flag" cybersecurity challenges and hackatons and Europe-wide cybersecurity exercises. These may be complemented with very sophisticated toolsets and sensor networks that are specific to the cybersecurity area, like Security Incident and Event Management, honeypots, sandboxes, simulation environments, advanced research infrastructures, secure control rooms and specialised ICT Security certification laboratories for testing digital products and services. Structural supports, encompassing organisational analysis, risk management, legal compliance and also business case development measures (i.e. economic and financial appraisal, evaluation) and audit tools can also be included.

Gateway services related to the particular ISAC for Co-operative Connected and Automated Mobility will also be needed. This would entail supports for cybersecurity infrastructure and operations to operators of essential services in the energy and transport sectors referenced in the NIS Directive. This could also be done in cooperation with with CEF Transport and CEF Energy⁴⁷.

3.8.2.3 Use of Building Blocks

Cybersecurity is a Building Block DSI and there is potential for re-use with data exchange functionality.

3.8.2.4 Benefits and expected outcomes

The Generic Services will allow the Member States to limit the economic and political damage of cyber incidents, while reducing the overall costs of Cybersecurity for individual Member States and for the EU as a whole.

3.8.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The DSI will likely result in improved compliance with the NIS Directive, higher levels of situational awareness and crisis response and also improve the product certification processes in Europe. This may open new avenues for cross European and multidisciplinary methodological and experimental cooperation that include Europe-wide views, perceptions and behaviours leading to higher preparedness and better cybersecurity resilience.

3.8.2.6 Governance, operations and stakeholders involvement

The participating Member States will be the owners of the implementation and deployment of the Generic Services funded under this action. A Governance Board was established as part of

⁴⁷ Initiatives on CCAM shall comply with the ITS Directive, its delegated acts and the C-ITS Strategy COM 2016/766.

the WP 2014 preparatory action. Consideration will be given to evolving this Governance Board to a body that is representative of various categories of Cybersecurity stakeholders.

3.8.2.7 *Type of financial support*

The Core Service Platform co-operation mechanisms will be procured by the Commission for a maximum of three years. Of the total EUR 7.5 million, 2 will be earmarked for the CCAM.

Title:	Cybersecurity - Core Service Platform
Indicative total budget for 2018:	EUR 7.5 million
Type of financial support:	Procurement – Framework contract(s) and/or open call
Indicative duration of the action:	3 years
Indicative call publication date:	Q4 2018

Generic services will be funded through grants and are open to organisations like operators of essential services, digital service providers, national competent authorities, single points of contact, co-ordinators of national level ISACs, CSIRTs, ICT Security Certification laboratories (list not exhaustive). In the case of CSIRTs, there is a limit of one grant per Member State. Priority will be given to entities that were not financed under WP2016 and WP2017. Of the total EUR 13 million, 4 will be earmarked for the CCAM.

Title:	Cybersecurity - Generic Services
Indicative total budget for 2018:	EUR 13 million
Type of financial support:	Grants – Call for proposals
Funding rate:	up to 75% of the total eligible cost
Consortium composition:	Proposals from individual organisations as well as consortia are eligible
Eligible organisations:	any
Indicative duration of the action:	24 months
Indicative call publication date:	Q2 2018
Indicative call closing date:	Q4 2018

3.9 Digital Public Procurement – eProcurement

3.9.1 Background and rationale

The main idea behind the action of the eProcurement DSI is to foster interoperability in the area of digital public procurement. New activities will be added to the DSI over the coming years so that until 2020 interoperability in all areas of procurement enable the achievement of the Digital Single Market (DSM).

3.9.1.1 The specific policy framework

The new Public Procurement Directives⁴⁸ adopted on 28 March 2014 require Member States to implement electronic procurement.

The successful implementation of the eProcurement DSI becomes essential to have a cross-border system working at the European level. In fact, all Member States had to set in place by 2016 eNotification, for the publication of notices and eAccess for the access of procurement documents. By 2018 they will have to set in place eSubmission for the submission of electronic bids. This means that from 2018 onwards all tender submissions will have to be done electronically. By 2018, contracting authorities will have to use eCertis, a mapping tool for certificates and other documents, when they request for the documentation necessary to bid. As of 2016, the Directives have required Member States have to keep the documentation to be retrieved in eCertis up-to-date.

As soon as Member States have implemented the new Public Procurement Directives, the European Single Procurement Document (ESPD) will become the standard self-declaration to be submitted by bidders for tender procedures.

To complete the picture, electronic invoices compliant with the European standards will have to be accepted by 2020.

The importance of data in public procurement has gained policy importance in the Member States. In the Digital Single Market Strategy of October 2015⁴⁹ the Commission highlighted a number of initiatives to facilitate the collection, consolidation, management and analysis of procurement data, supporting Member States' efforts towards better governance in public procurement. In this respect, data interoperability becomes more important at EU level.

3.9.1.2 The contribution to the Digital Single Market

The Digital Single Market Strategy recognises that public procurement plays an important role in promoting standards and interoperability. For this reason the Commission has produced an eGovernment action Plan 2016-2020 to help Member States towards end-to-end eprocurement (action 1 of Policy Priorities⁵⁰).

3.9.2 Implementation 2018

3.9.2.1 Baseline

Core Service Platform

The Core Service Platform provides support in the form of compliance testing for implementers to ensure that eTendering solutions/services are interoperable. To this aim a test infrastructure and services around it are offered to check the compliance of solutions/services. The first test infrastructure was set up in 2016 and covered the European Single Procurement Document. In 2017, the infrastructure has been extended to the eTendering interfaces mentioned below.

⁴⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2014:094:TOC>, 2014/25/EU, 2014/24/EU and 2014/23/EU

⁴⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52015DC0192>

⁵⁰ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0179>

Generic Services

The first activity supported under Generic Services was the implementation of eCertis in 2015. In 2016 a second activity was added the uptake of ESPD. In 2017, the eTendering interface was added and funding was still available for the first two activities. The CEF already has potential to create value in the eProcurement domain as it creates a high incentive for services to become interoperable.

3.9.2.2 New Actions in WP 2018

Core Service Platform

Only Generic Services will be supported in 2018.

Generic Services

Support will be continued for the activities started in previous years, namely eCertis, ESPD (including activities for migration to latest ESPD data exchange model version) and eTendering. One additional item will extend the offer for 2018: the implementation of a contract register. This corresponds to a policy priority of the Commission to support the set-up of contract registries in Member States (EU eGovernment Action Plan 2016-2020⁵¹). Contract registries are important not only for transparency, but also as a means of monitoring and controlling public expenditure. Its potential is fully exploited when it includes information on procedures both above and below the EU thresholds. A significant part of the information in the contract register will overlap with notices from the Publications Office (Tenders Electronic Daily – TED). Therefore, an inter-connection with TED should be ensured.

3.9.2.3 Use of Building Blocks

Those working on eTendering, will be encouraged to make the use of the eDelivery building block.

The use of other Building Blocks such as eID, eSignature and eTranslation, is strongly encouraged in the eProcurement calls. It is to be underlined that public and private service providers making use of eID and eSignature have to make sure that their solutions are compliant with the eIDAS Regulation as from mid-2018. In those cases the use of the Building Blocks offered under the CEF will automatically solve the issue. eID through EU-Login and eTranslation will be integrated into eCertis in Q3 2018.

3.9.2.4 Benefits and expected outcomes

The digitisation of public procurement aims to simplify the procedures and the lives of buyers and suppliers, in particular SMEs, as well as harmonise interfaces and processes in order to promote the Digital Single Market. It intends to improve accessibility, efficiency and increase transparency. It should also facilitate wider uptake of strategic public procurement. These actions lay the foundation to achieve the Once-Only Principle for public procurement in Europe.

⁵¹ <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52016DC0179>

3.9.2.5 Benefits and expected outcomes specific to the actions supported in 2018

eESPD: The eESPD has the potential of reducing bureaucracy in public procurement both for contracting authorities and bidders and paves the way for the digitisation of public procurement and the implementation of the Once-Only Principle in public procurement. CEF funding should greatly facilitate the take up of the eESPD.

eCertis: The use of e-Certis in combination with national registers and/or prequalification services for certificates will help economic operators in cross-border procurement. The implementation of eCertis will also facilitate the creation of a one-stop shop of information regarding certificates and supporting material requested in public procurement.

eTendering: The implementation of the eTendering interface by providers of eProcurement services will have a positive impact on the acceptance of eTendering solutions throughout Europe, especially by SMEs. This interface will allow economic operators, namely SMEs, to use their preferred eProcurement platform to submit bids on other platforms all over Europe.

Contract registers: Contract registers will be a very important tool to promote transparency for public expenses; furthermore they will play a key role in improving the governance of public procurement in Europe. Connecting them to the Publications Office (as e-sender) will reduce the administrative burden and improve the availability of information about public procurement.

3.9.2.6 Governance, operations and stakeholders involvement

The European Commission is in charge of the operational management of some of the services concerned (eCertis, eESDP); the Multi-stakeholder Expert Group on eProcurement (EXEP)⁵² is the advisory body to the Commission for this CEF DSI.

3.9.2.7 Type of financial support

Generic Services will be financed through grants. Proposals may be submitted by consortia consisting of at least 2 private or public entities from one or several Member State(s) and/or EEA countries participating in the CEF Telecom. In case of over subscription, priority will be given to the activities covering the (1) ESPD,⁵³ (2) eCertis (3) Contract registers and (4) eTendering activities.

Title:	Digital Procurement (eProcurement) – Generic Services
Indicative total budget for 2018:	EUR 3 million
Type of financial support:	Grants – Call for proposals
Funding rate:	up to 75% of the total eligible cost
Consortium composition:	at least 2 entities from one or several eligible countries
Eligible organisations:	private or public
Indicative duration of the actions:	18 months

⁵² <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3142>

⁵³ For this call, an ESPD service which respects v2 is to be implemented. This can be done either by using the Exchange Data Model (EDM) or by the Virtual Company Dossier (VCD) open source code.

Indicative call publication date:	Q2 2018
Indicative call closing date:	Q4 2018

3.10 Online Dispute Resolution – ODR

3.10.1 Background and rationale

3.10.1.1 The specific policy framework

Directive 2013/11/EU of the European Parliament and of the Council⁵⁴ (the ADR Directive) and Regulation (EU) No 524/2013⁵⁵ (the ODR Regulation) entered into force in July 2013. Member States had to transpose the ADR Directive by July 2015. The ODR Regulation which provides for the establishment of a Union-wide Online Dispute Resolution platform (ODR platform) to facilitate the resolution of online contractual disputes between consumers and traders became applicable in the beginning of 2016. The Alternative Dispute Resolution (ADR) entities that are established at national level and notified to the Commission are electronically registered with the ODR platform. The ODR platform allows consumers to submit their dispute online and have it dealt with entirely online by one of the national ADR entities. It is user-friendly and available in all the official languages of the EU, and Norwegian and Icelandic.

3.10.1.2 The contribution to the Digital Single Market

The ODR DSI ensures access to simple, fast and low-cost online means of resolving consumer disputes, which arise from online sales or services contracts. In this way it benefits consumers and traders and boosts their confidence in the Digital Single Market.

3.10.2 Implementation 2018

3.10.2.1 Baseline

Core Service Platform

The development of the DSI started at the end of 2012. After conclusive tests, the ODR platform started to operate fully on 15 February 2016. In its first year, over 24,000 consumer complaints were lodged and 260 alternative dispute resolution (ADR) bodies were electronically registered with the platform making them accessible to submit complaints between consumers and traders through the platform in all EU languages. More than a third of the complaints concerned cross-border purchases. Most complaints were about clothing and footwear, airline tickets and information and communication technology (ICT) goods. The platform is currently attracting more than 300,000 unique visitors per month, a number which

⁵⁴ Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (OJ L 165, 18.6.2013, p. 63).

⁵⁵ Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (OJ L 165, 18.6.2013, p. 1).

should continue to increase in the future in parallel with the further uptake of online shopping. Visits on the platform could reach 10 million per year by 2020.

Generic Services

The CEF Telecom 2015 call for proposals offered the possibility for notified ADR entities to apply for financial support so that they could interoperate with the ODR platform. However, only one ADR entity was funded in the end due, in part to the fact that the call for proposals was running at the same time as the ODR platform was gaining full coverage. Member States were in the process of setting up and notifying their ADR entities.

3.10.2.2 New Actions in WP 2018

Core Service Platform

In 2018, it will be necessary to evaluate the need to modernise the platform in order to ensure it benefits from state of the art technology and remains compatible with the Generic Services. In addition, a new support service model should be put in place in view of the large traffic that the platform is generating. A new module to manage the network of ODR contact points and to integrate other relevant EU level consumer assistance networks such as European Consumer Centres should be implemented as well as a collaborative platform.

Generic Services

CEF support is intended to facilitate the automation of cases submitted on the ODR platform through:

Objective 1

The deployment of eDelivery Access Points to connect to the ODR platform by:

- Notified national ADR entities
- Retailers; and/or

Objective 2

The operation or use of the eDelivery Access Point for one year; and/or

Objective 3

The upgrade of ADR's "case management" software so that it can communicate with the ODR platform using eDelivery (e.g. the upgrade would ensure that the case management system complies with the ODR's data model and electronic messages).

3.10.2.3 Use of Building Blocks

The eDelivery, eID and Automated Translation Building Blocks are currently being used by the ODR platform.

3.10.2.4 Benefits and expected outcomes

The current level of uptake of the ODR platforms and its fast increase shows that the platform is meeting the needs of online consumers and retailers across Europe and therefore the objectives set in the ODR Regulation and EU added value can be considered attained. The system now needs to be scaled up and professionalised in order to ensure a sustained high rate of use in the future.

3.10.2.5 Benefits and expected outcomes specific to the actions supported in 2018

Supporting the use of the eDelivery Access point will allow enhancing the level of trust in the communication exchanges among participants ultimately facilitating the automation of cases submitted through the ODR Platform.

3.10.2.6 Governance, operations and stakeholders involvement

The ODR platform is mainly governed by the Commission (DG JUST) that is in charge for its operation and maintenance, in accordance with the ODR Regulation. An ODR Committee which meets at least once a year and is comprised of Member State representatives, assists the Commission in the implementation of the ODR Regulation through the adoption of implementing acts [Articles 5 and 7 of the ODR Regulation]. In addition, ODR contact points have been established in each Member State and provide support to the users of the ODR platform. The network of ODR contact points meets at least twice a year. The Commission has also annual reporting obligations on the functioning of the ODR platform.

3.10.2.7 Type of financial support

The core platform will be procured for a period of 2 years.

Title:	Online Dispute Resolution platform (Core Platform)
Indicative total budget for 2018:	EUR 2 million
Type of financial support:	Procurement – Framework contract(s) and/or open call(s)
Indicative duration of the action:	2 years
Indicative call publication date:	First half of 2018

Generic Services will be funded through grants and are open only to notified national ADR entities and e-commerce platforms.

Title:	Online Dispute Resolution platform (Generic Services)
Indicative total budget for 2018:	EUR 0.4 million
Type of financial support:	Grants (Call for proposals)
Funding rate:	Up to 75% of the total eligible costs
Consortium composition:	Entities from at least one Member State
Eligible organisations:	Notified national ADR entities and e-commerce platforms
Indicative duration of the action:	1 year
Indicative call publication date:	Q3 2018
Indicative call closing date:	Q4 2018

3.11 eHealth

3.11.1 Background and rationale

The Directive 2011/24/EU on patients' rights in cross-border healthcare⁵⁶ promotes cooperation and the exchange of information among Member States aiming at delivering sustainable eHealth systems and services and providing interoperable applications at European level. The Directive set up the eHealth Network, which is a voluntary network connecting national authorities responsible for eHealth. In 2014, the eHealth Network endorsed starting to work on four eHealth services to receive financing from the CEF: ePrescription and eDispensation, Patient Summary, European Reference Networks, and Patient Registries (not included in this Work Programme).

The **ePrescription and eDispensation service** (ePrescription or eP) enables patients to receive equivalent medication treatment abroad than they would receive in their home country, by effectively transmitting the ePrescriptions across national borders. The service is defined in the guidelines⁵⁷ adopted by the eHealth Network in 2014.

The **Patient Summary service** (PS) provides a health professional an access to the verified key health data of a patient, through a document called Patient Summary. This is invaluable when a citizen needs unplanned care from a health provider in another country. The patient summary service also paves the way for the exchange of other relevant electronic health documents. The eHealth Network adopted Guidelines⁵⁸ defining the minimum patient summary dataset for electronic exchange in 2013.

The **European Reference Networks (ERN)**⁵⁹ connects designated healthcare providers and centres of expertise in the Member States, in particular in the area of rare, low prevalence and complex diseases and conditions. The clinical IT platform is the central tool for the joint work on diagnosing, treating and follow-up those patients needing highly specialised care and knowledge, not necessarily available in all EU countries. The ERN system entered into function in April 2017 for the ERN Collaborative Platform (ECP), and on 20 November 2017 for the Clinical Patient Management System (CPMS): already 7 consultation panels conducted as of 7 December 2017.

The ePrescription and Patient Summary services were piloted in large scale (epSOS⁶⁰/EXPAND⁶¹ and e-SENS⁶²). ePrescription, Patient Summary and European Reference Networks received CEF funding starting from the WP 2015, which enabled the start of the work on these services.

The objective of the eHealth DSI is to support Member States in the cross-border exchange of patient data increasing continuity of care, patient safety, their access to highly specialised care and the sustainability of health systems. This DSI will also support developing common

⁵⁶ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0045:0065:en:PDF>

⁵⁷ http://ec.europa.eu/health/sites/health/files/ehealth/docs/ev_20161121_co091_en.pdf

⁵⁸ https://ec.europa.eu/health/sites/health/files/ehealth/docs/ev_20161121_co10_en.pdf

⁵⁹ http://ec.europa.eu/health/ern/policy/index_en.htm

⁶⁰ <http://www.epsos.eu/>

⁶¹ <http://www.expandproject.eu/>

⁶² <http://www.esens.eu/>

identification and authentication measures to facilitate transferability of data in cross-border healthcare.

3.11.1.1 The specific policy framework

The Directive on patients' rights in cross-border healthcare calls the eHealth Network to support and facilitate cooperation among Member States in the area of eHealth, which it is doing by defining the priorities in cross-border eHealth and drawing up guidelines in the area of eHealth. These guidelines and other decisions of the Network are the primary reference for the eHealth DSI deployment. These guidelines deal, for the moment, in particular with the Patient Summary dataset and ePrescriptions.

The Directive also provides for cooperation in the specific areas where the economies of scale of coordinated action between all Member States can bring significant added value to national health systems. This is the case for European Reference Networks. The objectives of the Networks set in Article 12 of the Directive include European cooperation on highly specialised healthcare, pooling of knowledge, improvement of diagnosis and care in medical domains where expertise is rare, and helping Member States with an insufficient number of patients to provide highly specialised care. ERNs will help to provide affordable, high-quality and cost-effective healthcare and to improve these patients' access to the best possible expertise and care available in the EU for their condition. Solid cross-border IT solutions are necessary for the coordination of the Networks and for the cooperation on patients with clinical problems.

3.11.1.2 The contribution to the Digital Single Market

Health is considered as technology critical to the Digital Single Market. The Digital Single Market Strategy seeks to provide the essential interoperability and standardisation in the health area, including ehealth and telemedicine. There are a few major actions provided on eHealth whose goal is to take further the Digital Single Market Strategy. The initiatives are undertaken within the Connecting Europe Facility programme by developing the eHealth DSI, which will support Member States in setting up cross-border eHealth services, to exchange data from cross-border ePrescription and Patient Summary. Furthermore, by setting up the European Reference Networks (ERN) and developing an IT infrastructure to support their daily work, the Commission will foster the deployment of telemedicine and tele-monitoring.

3.11.2 Implementation 2018

3.11.2.1 Baseline

Core Service Platform

The development of the **Core Service Platform for ePrescriptions and the Patient Summary** started under WP 2015 and was continued under WP 2017. It includes the implementation, operation and support of the Core Services, as well as the maintenance, evolution, operation, change management of the OpenNCP software, the support to the National Contact Points for eHealth (NCPeH) and the Open NCP Community. The Open NCP technology is a set of software components necessary to run a NCPeH, whereas the OpenNCP Community is a set of methodologies, tools and people conducting effort on designing, coding, testing and releasing OpenNCP software coordinated by the eHealth DSI governance. In 2016 the necessary specifications and requirements were developed, discussed

and adopted by the Member States. In 2017 the Commission supported the Member States in the development and deployment of their National Contact Points for eHealth. An audit system of the National Contact Points for eHealth was put in place to check their maturity to join the Cross-Border eHealth Information Services (CBeHIS).

Also the development of the **Core Service Platform for the ERN** started under WP 2015 and was continued under WP 2017. This required implementing IT tools for clinical communication and patient management allowing for secure transmission of patient data, secure communication and information delivery, but will now also require the organisation and administrative facilitation of meetings and learning tools. The communication and collaboration tool was already developed by the Commission (DG SANTE). It was released for piloting and training by the pilot networks in 2016. In 2017 the ERN Collaborative Platform was customised to the needs of all 24 networks, which were officially set up. At the same time the Clinical Patient Management System was set up, development finalised in July, European Data Protection Supervisor prior check and deployment in November. The system is now operational and ERNs are piloting.

Generic Services

Under the WP 2015 sixteen Member States were awarded CEF funding to set up their National Contact Points for eHealth⁶³ and to start exchanging cross-border data from ePrescription and Patient Summaries. The deployment phase started in January 2017

3.11.2.2 New Actions in WP 2018

Core Service Platform

- ***ePrescription and Patient Summary***

The activities consist mostly of maintaining and building further the services already started under the WP 2015. Furthermore, the eHealth DSI⁶⁴ governing bodies will continue their activities to guide and orchestrate the set-up of the EU Cross-Border eHealth Information Services. The set-up is defined in the guidelines and other documents adopted by the eHealth Network, and in the specifications issued by the eHealth DSI governance bodies. The Commission will support the countries which will go live in a first wave (June 2018) and continue the preparatory cooperation with countries which will go live in wave 2 (2019) and 3(2020).

An initial audit of the National Contact Point for eHealth must take place before joining the EU-wide exchange called Cross-Border eHealth Information Services. The initial audits will be performed as part of the Core Services.

- ***European Reference Networks***

The ICT platform consists of modules that have been adapted for the different thematic fields of the ERNs. Funded actions will ensure the finalisation of the pilot phase (up to end Q1 2018), improvements following the feedback collected from this pilot phase, maintenance and the governance of the infrastructure of the Clinical Patient Management System (CPMS) and ERN Collaborative Platform (ECP). The CEF Building Blocks will be used to the extent

⁶³ http://ec.europa.eu/health/ehealth/docs/ev_20151123_co01_en.pdf

⁶⁴ http://ec.europa.eu/health/ehealth/docs/ev_20151123_co02_en.pdf

possible. The new functionalities will be added according to the growing needs of the networks. In particular, a module to enable full patient registries will be developed and tested.

Generic Services

- **European Reference Networks**

Support in the WP 2018 is envisaged to ensure adequate and efficient use of the Core Service Platform by the members of the ERNs. The actions consist of an ERN-specific, innovative e-learning/training solutions and disease-specific adaptation of the ERN Clinical Patient Management System, which includes limited hardware and technical maintenance, software maintenance, and assets maintenance located in the Member States hosting the European Reference Networks and their members, enabling the connection between them and with the Core Service Platform.

3.11.2.3 Use of Building Blocks

The Patient Summary and ePrescription services are currently reusing 2 components from the eDelivery Building Block, namely the Dynamic Service Location and Capability Lookup.

There is an on-going (started in 2017, to be completed in 2018) analysis on the possible reuse of the Trust Establishment and Backend Integration components from eDelivery Building Block. There is also work in progress regarding the definition of a new eDelivery component (Evidence Emitter) that could enable a full scope non-repudiation solution.

In 2018, further work is foreseen regarding the eDelivery Building Block in eHealth, namely the impact analysis and possible instantiation of the Message Exchange component (AS4) into eHealth Interoperability profiles (i.e. IHE profiles), as well as a security study to understand if eDelivery, as a whole, can provide sufficient security safeguards.

The study on the reuse of eID Building Block for Patient Identification is now completed. Further steps into eID implementation depend on an overall eID policy guideline from the eHealth Network and Member State deployment of eIDAS nodes and eHealth connectors. ERN services are already using eID Building Block, namely the EU-Login for authentication of Healthcare Professionals.

A development project to integrate eID is required towards the reuse of the Building Block for Healthcare Professional Identification in Patient Summary and ePrescription services.

A study on the reuse of eSignature Building Block is in progress. This study includes the analysis now being performed on eSeals (a component from eSignature) to enable them in eHealth. The reuse of eSignature Building Block depends on the outcomes of this study.

3.11.2.4 Benefits and expected outcomes

Overall, in line with the objectives of Directive 2011/24, the deployment of eHealth solutions will increase the safety and quality of care throughout the EU, notably by:

- providing accurate and immediate key clinical information needed in an emergency situation abroad, regardless of communication problems between the patient and the health professional;

- ensuring continuity of care across borders both in terms on information and access to medicinal treatment;
- facilitating access to highly specialised knowledge and care for patients suffering from rare and severe diseases; and
- creating the possibility to collect and analyse clinical data across borders to support public health and research.

3.11.2.5 Benefits and expected outcomes specific to the actions supported in 2018

Overall, in line with the objectives of Directive 2011/24, the deployment of eHealth solutions will increase the safety and quality of care throughout the EU, notably by:

- maintaining of the ePrescription/Patient Summary Core Services ("eHDSI"), which enable the provision of accurate and immediate key clinical information needed in an emergency situation abroad, regardless of communication problems between the patient and the health professional;
- maintaining of the ERN Collaborative Platform (ECP) and the Clinical Patient Management System (CPMS), which facilitate access to highly specialised knowledge and care for patients suffering from rare and severe diseases;
- adding new functionalities to the ERN Collaborative Platform and the Clinical Patient Management System, which will create the possibility to collect and analyse clinical data across borders to support public health and research.

3.11.2.6 Governance, operations and stakeholders involvement

The governance model⁶⁵ of the eHDSI for the PS and eP (eHDSI-PS/eP) was adopted at the eHealth Network meeting in November 2015 and revised in November 2016 and for the European Reference Networks (eHDSI-ERN) in the ERN Board of Member States in June 2016. Stakeholders, such as Standards Developing Organisations (European Committee for Standardization, SNOMED International), experts, fora, consortia, representative organisations (patients, professionals) will be engaged through the eHealth stakeholder group, the Joint Action supporting the eHealth Network, other projects and expert groups. Management decisions with strategic policy relevance for the eHDSI-PS/eP will be submitted to the eHealth Network for approval in accordance with the governance model. Other specifications will be governed by the Network or other relevant eHDSI governance bodies.

Management decisions with policy relevance for the eHDSI-ERN will be submitted to the ERN Board of Member States for approval and drafted by its IT Advisory Group. Specifications and guidelines will be governed by the relevant bodies in a governance structure set up by the ERN Board of Member State. Activities to promote the use of the ERN IT platform for research will be coordinated through the concerted efforts of the pan-European ESFRI research infrastructures such as ECRIN (European Clinical Research Infrastructures Network) and ELIXIR (European Life-science Infrastructure for Biological Information).

3.11.2.7 Type of financial support

The Core Service Platform will be implemented through procurement contracts.

⁶⁵ https://ec.europa.eu/health/sites/health/files/ehealth/docs/ev_20161121_co06_en.pdf

Title:	eHealth – Core Service Platform
Indicative total budget for 2018:	EUR 3 million
Type of financial support:	Procurement – Framework contract(s) (indicative number of contracts: 1 to 10 specific contracts)
Indicative duration of the action:	48 months
Indicative call publication date:	Q1 2018

Generic Services will be funded through grants and are open only to ERN: Single European Reference Networks designated under Directive 2011/24/EU or their consortiums.

Title:	eHealth – Generic Services
Indicative total budget for 2018:	EUR 5 million
Type of financial support:	grants - Call for proposals
Funding rate:	up to 75% of the total eligible costs
Consortium composition:	ERN: European Reference Networks as consortiums designated under Directive 2011/24/EU.
Eligible organisations:	ERN: Coordinating entities of Single European Reference Networks designated under Directive 2011/24/EU, including their members, as necessary
Indicative duration of the action:	18 months
Indicative call publication date:	Q2 2018
Indicative call closing date:	Q4 2018

3.12 Business Registers Interconnection System – BRIS

3.12.1 Background and rationale

3.12.1.1 The specific policy framework

The limited cross-border access to business information results in a risky business environment for consumers and for existing or potential business partners, and reduces legal certainty. Efficient cross-border cooperation between the European business registers is therefore essential for a smooth functioning of the EU Single Market. The stakeholders impacted are both the public who wish to access cross-border information on companies, and the companies of the EU when carrying out cross-border activities and when involved in cross-border mergers. Furthermore the business registers themselves are impacted by the problem, as they face challenges in communicating with each other for example in respect to cross-border mergers or foreign branches.

Directive 2012/17/EU⁶⁶ of the Parliament and the Council of 13 June 2012 requires the establishment of an information system that interconnects the central, commercial and companies registers (also referred to as business registers) of all Member States. The system - Business Registers Interconnection System (BRIS) - went live on 8 June 2017 in line with the underlying Directive. It consists of a Core Service Platform (European Central Platform (ECP) and the Member State business registers and is using the European e-Justice Portal as the European electronic access point to information on companies.

3.12.1.2 The contribution to the Digital Single Market

The BRIS DSI will help to enhance confidence in the single market through transparency and up-to-date information on companies and reduce unnecessary burdens on companies. As such, the initiative directly contributes to President Juncker's priorities of creating a connected Digital Single Market. This has been confirmed in the Digital Single Market Strategy which mentioned "Making the business registers interconnection a reality by 2017" as one of the key actions for the e-Government Action Plan 2016-2020.

3.12.2 Implementation 2018

3.12.2.1 Baseline

Core Service Platform

So far, the implementation of BRIS has covered (1) designing the high-level architecture for BRIS; (2) establishing the interfaces between the BRIS DSI and the Member States systems as well as the European e-Justice Portal; (3) piloting the e-Delivery solution for BRIS; (4) setting up the central platform; (5) integration and deployment activities; and support services and evolutive maintenance as of June 2017.

For the interconnection of business registers, the central platform orchestrates all traffic among the domestic business registers and between the European e-Justice Portal and the business registers in the 28 Member States, plus the EEA countries participating in the CEF Telecom Programme. The system went live in Q2 2017, supported by the main integration and deployment work that took place in 2016-2017.

Concerning the central platform, the main actions in 2018 will focus on running the service and providing helpdesk services to the system. The technical tasks will also cover a number of improvements for example related to monitoring, logging and reporting, as well as possible contribution to the piloting of cross-border implementation of the once-only principle. A technical helpdesk will provide support to the platform users and ensure effective use of the platform. The Commission will also provide hosting for the necessary environments.

In conjunction with the technical tasks, the Commission will also perform stakeholder engagement, communication and change management activities, playing both a steering and facilitator role. In addition, the Commission will provide service administration activities such as the day-to-day administration and operation of the BRIS central services and provision of statistics on the use of the several services.

⁶⁶ Directive 2012/17/EU of the European Parliament and of the Council of 13 June 2012 amending Council Directive 89/666/EEC and Directives 2005/56/EC and 2009/101/EC of the European Parliament and of the Council as regards the interconnection of central, commercial and companies registers Text with EEA relevance

Generic Services

Over the past two years the implementation of Generic Services has focused on activities related to:

- Implementation and support of the requirements, data model and standard messages coming from BRIS;
- Testing activities to ensure successful transition to a fully operational mode;
- Deployment of the eDelivery Building Block for the purpose of document delivery;
- As of mid-2017, operation and maintenance of the access points.

3.12.2.2 New Actions in WP 2018

Core Service Platform

Funding will be necessary in 2018 in order to provide continuity of support services for the BRIS DSI and to ensure efficient evolutive maintenance of the Core Platform. In addition, funding is also needed for further communication activities about BRIS to relevant stakeholders.

Generic Services

The Generic Services for BRIS will not be funded by the CEF WP 2018.

3.12.2.3 Use of Building Blocks

BRIS uses the eDelivery Building Block for the information transport infrastructure. This can be implemented by including eDelivery into the generic service action proposed.

The European e-Justice Portal, which is used by BRIS, also relies on EU-Login for user authentication and so it indirectly integrates the eIdentification Building Block .

eSignature and the Automated Translation Building Blocks are planned for integration in 2018/2019.

3.12.2.4 Benefits and expected outcomes

The main expected results of the business registers interconnection are:

- an increase in confidence in the European Single Market by ensuring a safer business environment for consumers, creditors and other business partners;
- a higher degree of legal certainty as to the information in the European business registers;
- an improvement of the performance of public administration regarding cooperation between business registers in Europe in procedures for cross-border mergers, and exchange of relevant information regarding branches and the company.

Other specific expected benefits are:

- improved quality of data in domestic business registers with cross-border coherency;
- digital implementation of cross-border processes;
- increased transparency and easier cross-border access to information on companies;
- increased possibilities for cross-border activities for companies;
- facilitation of increased cross-border competition;
- facilitation of cooperation and communication between registers.

3.12.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The support for the BRIS Core Platform will ensure a smooth operation of the service and allow for evolutive enhancements to be added to the platform in a timely manner. The communication activities will raise awareness about BRIS thus increasing the use of the system and creating a more transparent business environment in the Single Market.

3.12.2.6 Governance, operations and stakeholders involvement

BRIS is a joint effort of the Commission and the Member States. For the Commission, DG JUST is the system owner, with DG DIGIT as solution provider for the Core Service Platform. DG JUST will also provide the user interface on the European e-Justice Portal, which will serve as European access point to company data via the central platform. The Member States will have to connect to the central platform to ensure interoperability and communication with the other registers and the Portal. A governance structure is put in place, whereby the Commission works with the Member States both at policy level (through the Company Law Expert Group) and at technical level (through a Technical User Group, involving IT experts from the business registers).

3.12.2.7 Type of financial support

The Core Service Platform will be implemented through procurement contracts.

Title:	BRIS – Core Service Platform
Indicative total budget for 2018:	EUR 1 million
Type of financial support:	Procurement – Framework contract(s) (indicative number of contracts: 1 to 3 specific contracts)
Indicative duration of the action:	24 months
Indicative call publication date:	Q1 2018

3.13 Electronic Exchange of Social Security Information (EESSI) - Integration, qualification and production rollout of national social security systems with EESSI

3.13.1 Background and rationale

The main objective of this DSI is to improve the cross border communication between the national social security institutions of 32 countries (EU Member States and Iceland, Norway, Liechtenstein and Switzerland), by introducing an electronic communication platform for efficient exchange of information. This platform will:

- Strengthen the protection of the social security rights of mobile citizens by automating at an optimal level the application of EC regulations on social security;
- Enable efficiency in the decision-making process for the actual calculation and payment of social security benefits to citizens who exercise mobility across Europe;
- Allow secure, efficient and verifiable data transfers for the citizens concerned;
- Collect accurate statistical data on social security coordination data exchanges.

The EESSI platform covers the cross-border business processes of all branches of social security such as: accidents at work and occupational disease benefits, family benefits, pension benefits, recovery of benefits and contributions, sickness and healthcare benefits, unemployment benefits, etc.

3.13.1.1 The specific policy framework

The activities planned for EESSI DSI will help Member States comply with the provisions and deadlines specified by Regulation (EC) No 883/2004 of the European Parliament and of the Council⁶⁷ and Regulation (EC) No 987/2009 of the European Parliament and of the Council⁶⁸.

3.13.1.2 The contribution to the Digital Single Market

EESSI has a great potential to contribute to the Digital Single Market and increase the growth perspective. EESSI will allow digital exchanges between the social security coordination institutions (around 15,000 institutions are concerned out of which some are private). This digitisation will offer a new range of capabilities to the concerned institutions, quicker interactions between them and with the citizens, possibility to exploit big data (EESSI volume is estimated several millions messages annually), opening the potential for fraud and error detection as well as other applications with high potential for the Digital Single Market (statistics, data mining, data analysis in cross-border context). The effort to install and integrate EESSI with existing national legacy systems will create a high industrial interest and growth potential, with estimated calls for tenders in some Member States going as high as 30-50 million Euro.

⁶⁷ Regulation (EC) No 883/2004 of the European Parliament and of the Council of 29 April 2004 on the coordination of social security systems (OJ L 166, 30.4.2004, p. 1).

⁶⁸ Regulation (EC) No 987/2009 of the European Parliament and of the Council of 16 September 2009 laying down the procedure for implementing Regulation (EC) No 883/2004 on the coordination of social security systems (OJ L 284, 30.10.2009, p. 1).

EESSI is invaluable in terms of benefits for the citizens as it will provide the necessary IT and business services to ensure a quicker and more accurate processing of cross-border claims in social security coordination (covering aspects such as pensions, unemployment benefits, family and children benefits, sickness cases etc.)

As for Big Data, cloud services are central to the EU's competitiveness, EESSI will be the first large trans-EU system having the capability of exchanging messages with unlimited volume and offering the possibility to run the software in cloud installations at national level (EESSI was developed on the cloud infrastructure and for the last 3 years, Member States used the cloud environment for testing and final user interactions).

A last argument to underline the importance of EESSI for the Digital Single Market is the interoperability and standardisation aspects. DG EMPL developed and refined the software along the transport and messaging protocol recommended by the EC (ebMS v.3) in cooperation with international organisations (OASIS). As all institutions from the social security sector will connect to the EESSI via their National Access Points and thus use this standardised protocol, thus the interoperability between administrations will be achieved *de facto*. In addition DG EMPL developed a standardised suite of software dedicated to the national domain, which the Member States can optionally use. Those who will decide to use this application will in fact achieve a higher level of interoperability.

Last, but not least, EESSI is requiring a lot of digital skills and expertise for the installation, configuration and integration of the software, as well as for the training and assistance of users. A high number of IT specialists, trainers, consultants, service operators will be needed to support national EESSI operation, creating thus a huge opportunity for the development of the Digital Single Market.

3.13.2 Implementation 2018

3.13.2.1 Baseline

Core Service Platform

During 2015-2017 several activities have been implemented or are in progress for the ***Core Service Platform***:

- Implementation, integration and testing of new development releases of the main EESSI messaging and information transmission platform composed by a Central Service Node, Access Points and the Reference Implementation of a National Application (RINA) supporting the enforcement of the relevant social security coordination business processes. The Central Service Node is the hub hosting the Directory service of all EESSI social security institutions, orchestrating the exchanges and providing the repository of the business processes (workflows) for all 8 domains of social security coordination. It provides also the statistical data and audit data about the exchanges of the Access Points. The Access Points offer the basis of reliable and secure transport and messaging between Member States as well as the intelligent routing feature (allowing the messages to reach the right destination). RINA is a case management portal reference implementation offering multiple services such as management of social security coordination cases, enforcing the specific sectorial

business processes in an effort to avoid delays, errors and lack of information in processing of social security coordination cases.

- Integration and development of eDelivery eSENS Access Point and integration in RINA as an alternative to the current eDelivery Holodeck transport and messaging layer. This alternative has been requested by several Member States.
- Integration of the eID and the Automated Translation Building Blocks in RINA in order to formally identify the users of RINA and, respectively, allow automated translation of comments included by clerks in the Structured Electronic Documents (SEDs).
- Set up of the third and fourth level IT support activities for the national users (the first and the second line of support is ensured by the Member State help desk but the specialised support is provided by the EESSI core team from DG EMPL).
- Direct technical support for technical teams in Member States testing the Access Points and RINA software.
- Support for preparation of integration and transition plans coordinated by the EESSI central team.

Generic Services

For the Generic Services, in 2016 and 2017, Member States prepared for acquisition of software, hardware, training, installation and integration of EESSI software in the Member States IT national systems at the level of the relevant EESSI Access Points and institutions. Furthermore, a number of important documents and standardised forms and processes necessary for the implementation of the EESSI project were approved by the Member States.

3.13.2.2 New Actions in WP 2018

Core Service Platform

- Cover the third and the fourth level IT support activities for the EESSI for which DG EMPL will further develop an extensive IT support activities for specialised assistance for MS help desks working in the Access Points. There will be 60-70 Helpdesk teams in Member States that will need a strong support from EESSI central team.
- Provide direct technical support for Member States technical teams responsible of the installation and integration of the Access Points.
- Further develop functionalities and ensure maintenance of CSN, AP and RINA software.
- Further prepare training material and training activities for the Member States.
- Enhance and set up a conformance testing for implemented RINA and National Applications.

Generic Services

The Generic Services for EESSI will not be funded by the CEF WP 2018.

3.13.2.3 Use of Building Blocks

The EESSI project developed the Access Point and the RINA under the [ebMS 3.0 protocol](#) complementing the eDelivery Building Block. During 2017, the EESSI development integrated the eSignature and eDelivery Building Blocks enriching the cross-domain offer proposed to Member State administrations and currently proposes help desk for integration and specialised second level support. As from mid-2017 the EESSI deployment uses eTranslation and also includes eID building block in RINA.

3.13.2.4 Benefits and expected outcomes

The activities planned for EESSI DSI will contribute in particular to supporting an efficient transition to electronic exchange of data in order to reduce the period of coexistence of digital exchange with the current paper procedures, increase overall efficiency in social security coordination activity and help Member States comply with the provisions and deadlines specified by Regulations (EC) 883/2004⁶⁹ and 987/2009⁷⁰.

3.13.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The actions supported in 2018 will allow further development of the central helpdesk team as well as the support of EESSI RINA (evolutive and corrective maintenance) and of the eDelivery solution (AS4.NET) developed by DG EMPL. It is expected the 20 -25 Member States will use RINA as their main case management portal and the funding will help the central team to cope with the support requests coming from national teams.

3.13.2.6 Governance, operations and stakeholders involvement

The EESSI project is a joint effort of the Commission and the Member States. For the Commission, DG EMPL is the project owner and solution provider for the central platform and reference national application (RINA), while the Administrative Commission for Social Security Coordination and the Technical Commission play the steering role as well as the forums deciding on whether the "system is fit for purpose" or what changes it needs during the implementation phase.

The Member States will have to connect to the Access Points to ensure interoperability and communication with each other and with the Central Service Node. The existing EESSI governance bodies will be reused in the CEF project, whereby the Commission works with the Member States both at policy level (the Administrative Commission) and at technical level (the Technical Commission).

3.13.2.7 Type of financial support

The Core Service Platform will be implemented through procurement contracts.

Title:	Electronic Exchange of Social Security Information (EESSI) - Integration, Qualification and Rollout of EESSI national
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⁶⁹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1455198038927&uri=CELEX:32004R0883>

⁷⁰ <http://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex:32009R0987>

	IT systems - Core Service Platform
Indicative total budget for 2018:	EUR 5 million
Type of financial support:	Procurement – Framework Contract(s)
Indicative duration of the action:	12 months
Call publication date	Q1 2018

3.14 European e-Justice Portal

3.14.1 Background and rationale

In its Communication of May 2008, the European Commission proposed to establish the European e-Justice Portal, to be managed in close cooperation with the Member States. The Portal was launched on 16 July 2010 and has been expanded ever since – today it has approximately 350,000 visitors each month.

The Portal's objective is to contribute to the creation of a European judicial area by leveraging ICT to facilitate access to justice and enable electronic cross-border judicial proceedings and judicial cooperation. The European e-Justice Portal, now in its second stage of development, is expanding from being a provider of information to being a provider of services in the judicial area.

The expansion into the services area began in 2014 with the launch of three modules, a first voluntary Interconnection of Insolvency Registers, Find a Lawyer and Find a Notary. It continued in 2015 and 2016 with the European Court Database, the search of national and European case law based on the European Case Law Identifier (ECLI) and access to e-CODEX for submission of online claims.

In parallel with the development of the European e-Justice Portal, a large consortium of Member States ran the e-CODEX⁷¹ Large Scale Pilot to establish a secure backbone for electronic communication in the judicial area. e-CODEX is an IT system for cross-border judicial cooperation which allows users, i.e. judicial authorities, legal practitioners or citizens, to send and receive documents, legal forms, evidence or other information in a secure manner. It operates as a decentralised network of access points interlinking national judicial systems to one another and to the European e-Justice Portal.

In 2016, the Justice and Home Affairs Council called on the European Commission to create a new IT solution in the e-Justice area for prosecutors and judges to be able to request and receive electronic evidence (e-evidence) in criminal cases using the newly introduced European Investigation Order. The platform will be established in the form of national portals communicating with each other thorough the e-CODEX secure network.

Pursuant to Regulation (EU) 2016/1191 of the European Parliament and of the Council⁷² ("the Regulation on Public Documents), a new module for the integration of the electronic versions

⁷¹ <https://www.e-codex.eu/>

⁷² Regulation (EU) 2016/1191 of the European Parliament and of the Council of 6 July 2016 on promoting the free movement of citizens by simplifying the requirements for presenting certain public documents in the European Union and amending Regulation (EU) No 1024/2012 (OJ L 200, 26.7.2016, p. 1).

of multilingual standard forms into national e-government systems is now being added. This module will support the development of e-government in the field of public documents.

All modules comprise a Core Service Platform and Generic Services. In the case of e-CODEX and e-evidence, which follow a peer-to-peer architecture, the Core Service Platform is seen to represent the full set of installable software solutions that are necessary for establishing and operating a Generic Service (a peer), as well as all the central activities required for the module to operate and evolve.

The number of connected Generic Services varies depending on the module. The deployment of additional Generic Services to cover more countries or judicial entities is essential to the usefulness of each service.

3.14.1.1 The specific policy framework

The European e-Justice Portal is developed in accordance with the Strategy on European e-Justice 2014-2018⁷³ and the Multiannual European e-Justice Action Plan 2014-2018⁷⁴.

The module for the Interconnection of Insolvency Registers is developed in accordance with Regulation (EU) 2015/848 of the European Parliament and of the Council⁷⁵.

The e-evidence project is developed in accordance with Council conclusions on improving criminal justice in cyberspace⁷⁶ and Directive 2014/41/EU of the European Parliament and of the Council⁷⁷.

The project to integrate electronic multilingual standard forms into national IT systems is developed pursuant to the Regulation on Public Documents⁷⁸.

3.14.1.2 The contribution to the Digital Single Market

Ensuring that our fundamental rights as individuals in the EU and as consumers are upheld in the digital world is at the forefront of the e-Justice strategy. Consumers have the right to adequate protection of their rights both online and offline, and building confidence and trust in the online world is crucial to the creation and success of the DSM. The strategy proposes developments in a number of justice areas, including company law, consumer redress and improvement of the European e-Justice Portal.

⁷³ [http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1427368506207&uri=CELEX:52013XG1221\(02\)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1427368506207&uri=CELEX:52013XG1221(02))

⁷⁴ [http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1427368544336&uri=CELEX:52014XG0614\(01\)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1427368544336&uri=CELEX:52014XG0614(01))

⁷⁵ Regulation (EU) 2015/848 of the European Parliament and of the Council of 20 May 2015 on insolvency proceedings (OJ L 141, 5.6.2015, p. 19).

⁷⁶ http://www.consilium.europa.eu/en/meetinGeneric_Services/jha/2016/06/Cyberspace--EN_pdf/

⁷⁷ and Directive 2014/41/EU of the European Parliament and of the Council of 3 April 2014 regarding the European Investigation Order in criminal matters (OJ L 130, 1.5.2014, p. 1).

⁷⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R1191>

3.14.2 Implementation 2018

3.14.2.1 Baseline

Core Service Platforms

The European e-Justice Portal Core Service Platform is being actively developed, with a focus in particular on the alignment of the existing interconnection of insolvency registers with new legislation and on the expansion of the access to e-CODEX module to allow submissions of, e.g., European Payment Orders and European Small Claims online.

The governance, operational and evolutive maintenance of the e-CODEX Core Service Platform is ensured until the end of 2018 by a consortium of Member States' public administrations (usually Ministries of Justice), with funding from the Justice Programme.

In addition to funding from the Justice Programme, DG Justice and Consumers coordinates a working group consisting of all Member States to establish the e-evidence Core Service Platform. The key component of the e-evidence CSP is a reference implementation of a secure web portal that each Member State will install at a national level. The set of national portals communicating with each other via e-CODEX will form the (decentralised) European e-evidence platform.

Generic Services

Member State Generic Services continue to be created to connect to the existing modules of the Core Service Platform. These are funded via the CEF Work Programme 2016 and 2017 or from different sources (such as the Justice Programme).

3.14.2.2 New Actions in WP 2018

Core Service Platform

Outside the framework of the CEF funding programme, the Commission will continue the operation and maintenance on the European e-Justice Portal Core Service Platform and finalise the preparation of the e-evidence Core Service Platform.

CEF funding, in the form of a call for proposals, is sought to ensure the continued governance and maintenance of the e-CODEX Core Service Platform for an additional two years (2019 and 2020) during the time that a long-term sustainability solution is put into place⁷⁹. The proposals should address all of the following issues (issues marked as "*if max budget*" will be required as part of the proposals only in case the maximum requested budget is made available through this Work Programme):

- transparent administration and communication about the progress of the project, monitoring of uptake of e-CODEX and identification of business needs;
- description of a governance model to be used by the entity that will ensure the long-term sustainability of the project;
- development of several governance scenarios (*if max budget*);
- stakeholder engagement using electronic means of communication;

⁷⁹ https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-3600084_en

- stakeholder engagement also via physical meetings (*if max budget*);
- provision of operational excellence, bug fixing and regular updates (with a swift response to security issues), adjustment of the Core Service Platform to:
 - support amendments in legal procedures for which e-CODEX is used;
 - maintain semantic interoperability in areas already using e-CODEX and achieve it in new areas of use;
 - align with changes in the CEF Building Blocks and/or other software components;
- collection of user feedback in a systematic way and preparation of future adaptations of the Core Service Platform;
- upgrade of the Core Service Platform to evolving standards and collected user requirements and exploration of technical solutions to limit the operational overhead caused by the growing number of participants in the network, such as a hub architecture and/or dynamic discovery (*if max budget*);
- proactive monitoring of changes in legal procedures for which e-CODEX is used (*if max budget*);
- limited support to projects leveraging e-CODEX such as iSupport or e-evidence (conference calls, remote assistance);
- extended support to projects using e-CODEX, including active participation therein for the purposes of efficient use of e-CODEX (*if max budget*);
- ensure communication activities at a basic level (web site updates, response to information requests, newsletters, social media activities, etc.)
- ensure communication activities also by way of participation in conferences, creation of audio-visual content, management of user communities and engagement with cross-continental cooperation (e.g., with the US or Latin American countries) at policy level (*if max budget*);
- outreach to further Member States for deploying the e-CODEX generic service in the context of one or more areas where it is in use;
- coordination and support for (consortia of) Member States to deploy e-CODEX using EU funding (*if max budget*);
- further developing e-CODEX to support areas where its potential use has already been identified and monitoring of new areas where it could apply, including limited engagement with the relevant stakeholders in those areas (assistance in drafting legal proposals, consultation for implementation);
- active development of e-CODEX support in the new areas of application, both at a technological and business level (*if max budget*);
- handover to the organisation that will ensure long-term sustainability of e-CODEX (deliverables, conference calls, knowledge transfer workshop);

- further knowledge transfer workshops for handover, co-working (drafting of technical manuals specific to e-CODEX long-term sustainability, exchange of personnel), organisation of a conference for the community of technical support (*if max budget*).

The proposed consortium should be formed of Member State authorities and possibly other organisations supporting them, if justified, with the necessary complementary expertise to cover at the minimum the full set of issues outlined above. The action should follow seamlessly from the presently ongoing Me-CODEX project, due to be completed towards the end of 2018.

Eligible organisations: public administrations.

Generic Services

New Generic Services should continue to be developed, expanding the area of coverage of the various Core Service Platform modules. This evolution is essential to the usefulness of each service.

The details of the Generic Services depend on the nature of the Core Service Platform module to which it has to be connected:

- *E-evidence*: Member States have to take all the organisational and technical steps to establish a connection to the European e-evidence platform, a decentralised network of national portals communicating with each other via e-CODEX. This can entail the installation of an e-CODEX access point, if not already available, and connecting it to existing national portals that are upgraded to support the specific e-evidence workflow⁸⁰. Alternatively, a Member State can choose to install and connect to e-CODEX a reference implementation of a portal supporting the e-evidence workflow that will be provided by the European Commission; [*in the Work Programme 2017, the module was part of "Access to e-CODEX"; now it is included separately*]

Eligible organisations: public administrations.

- *Interconnection of Insolvency Registers (IRI)*: the national insolvency registers have to implement the agreed web service specification necessary for communication with the Core Service Platform either via synchronous web services or by leveraging eDelivery for the same purpose; [*no change from the Work Programme 2017*]

Eligible organisations: national public administrations competent for or operating insolvency or commercial registers.

- *Access to e-CODEX*: support EU Member States⁸¹ for joining the European Order for Payment (EOP) and the European Small Claims (ESC) pilots as parties able to receive claims from users of the European e-Justice Portal, but also to participate in upcoming e-CODEX-based electronic judicial workflows addressed in the context of the European e-Justice Portal or associated cross-border initiatives. With regard to the

⁸⁰ EU funding is limited to the necessary adaptations and modifications to existing national solutions in order to allow them to successfully communicate in the context of the e-evidence platform. On the other hand, implementation of the European Investigation Order workflows in a purely national context, unrelated workflows or disproportionately costly horizontal features are outside of the scope.

⁸¹ Non-EU Member States are excluded from *Access to e-CODEX* since the concerned judicial procedures only exist in the EU Member States.

existing workflows, EOP and ESC, priority will be given to the applications that also propose to support sending back replies from the national court(s) via e-CODEX to the users of the European e-Justice Portal.

To achieve implementation for Access to e-CODEX, Member States are invited to submit a proposal that covers one or more of the activities below:

- activities related to deployment, configuration, testing and operation of an eDelivery platform. This will also contribute to the compliance with the requirements set out in the eIDAS Regulation
- activities related to the deployment, adaptation, configuration, testing and operation of the e-CODEX connector (or of other existing third party software that can fulfil the same role with minimal adaptation) required for fulfilling the tasks mandated by the e-CODEX communication standard as described in the e-CODEX specifications: generation of the necessary evidence of reception, signature validation, message packaging and other relevant tasks;
- one set of activities per judicial workflow for tasks related to the connection of the national case management infrastructure to the eDelivery platform, the generation and consumption of XML, PDF and other types of files mandated by the judicial procedure in a pre-agreed cross-border format (such as the e-CODEX XSDs in the case of the EOP and ESC procedures), end-to-end testing and operation of the system.

With regard to the EOP and ESC workflows, the connection will be considered achieved if and only if, for the judicial workflow(s) included in the proposal, the users of the e-Justice Portal can send to one or more courts in the Member State applying for funding any form linked to the judicial workflow that is meant to be sent from the claimant to the court, receiving evidence of reception. If included in its application, the Member State will also have to prove being able to send back all forms meant to be sent from the court to the claimant. The transmission is to be done using the technologies and standards described above or compatible ones; *[no change from the Work Programme 2017 except the move of e-evidence as a separate module]*

Eligible organisations: public administrations.

- *Integration of electronic multilingual standard forms into national e-government systems:* under the Regulation on Public Documents, a citizen who requests from a Member State authority a public document (for example, a birth certificate) to be presented in another Member State can also request a multilingual standard form. This form must be issued by a Member State authority and be attached to the public document as a translation aid. The objective of the form is to avoid the receiving Member State authority requesting the citizen to provide a translation of the public document. The format and the standard content of the forms are laid down in the Regulation on Public Documents. The forms will be available in electronic form in the European e-Justice Portal so that Member State issuing authorities can fill and print them out, but the e-forms can also be integrated in national e-government systems so that:
 - Member State authorities can issue the forms directly from their national IT systems having access to all the information stored there; and

- Member State authorities can receive forms issued and signed electronically by other Member State authorities after the Commission and the Member States have agreed on a common set of XML schemas.

The integration of the forms in national IT systems, which is the objective of this action, would simplify administrative procedures through digital means, thereby facilitating the application of the Regulation on Public Documents to the benefit of public administrations and of citizens requesting the forms. *[new module added in the Work Programme 2018]*

Eligible organisations: public administrations.

Each Generic Service may comprise up to three types of activities:

- *hook-up*: covers all the activities linked to the development of specific connection software, modifications and adaptations of existing information systems for the purposes of the hook-up. For example: installation and configuration of hardware and software infrastructure, required adaptations in existing software solutions and data sources, deployment of the generic service, local and integration testing, project management, etc.

In duly justified and substantiated cases applications which aim to substantially increase the scope and/or the added value of an in situ generic service may also be considered eligible for evaluation as hook-up activities;

- *operation*: covers operational costs such as hosting, acquisition of certificates or software licenses, technical support, etc.;
- *maintenance*: covers any activity required for maintaining the specific connection software and associated configuration in good working order. This includes adaptive maintenance (changing the software to work in a changing infrastructure), corrective maintenance (resolving bugs) and evolutive maintenance (changing the software to adapt to evolving requirements such as changes in the core platform or in the national service).

3.14.2.3 Use of Building Blocks

As Core Service Platform, the European e-Justice Portal reuses the eIdentification, eSignature, eDelivery and Automated Translation. The individual modules use the Building Blocks as follows:

- *E-evidence* uses the eDelivery, eSignature and eIdentity Building Blocks;
- *Interconnection of Insolvency Registers (IRI)* uses the eDelivery Building Block;
- *Access to e-CODEX* uses the eDelivery and eSignature Building Blocks;
- *Integration of electronic multilingual standard forms into national e-government systems*: no Building Blocks (none applicable).

3.14.2.4 Benefits and expected outcome

By increasing the number of data or service providers connected to each of the European e-Justice Portal modules, the value of the services offered to citizens, businesses and legal

practitioners will grow proportionally to the extra coverage. The specific benefits depend on the module in question:

- *E-evidence*: as a consequence of the growing use of electronic communication tools such as social media, webmail, messaging services and apps, an increasing number of criminal investigations have to rely on electronic evidence, such as information on the holder of an email account, messages exchanged via Facebook Messenger or information on the timing of WhatsApp calls. The e-evidence platform will offer a secure channel and standardised workflow for using the European Investigation Order in order to obtain such data for law enforcement and judicial authorities in the European Union;
- *Interconnection of Insolvency Registers (IRI)*: the interconnection of national insolvency registers is key to improving the provision of relevant and timely information to creditors and courts involved and prevent the opening of parallel insolvency proceedings. With this in mind the envisaged actions shall allow Member States to expediently comply with the requirements of Regulation (EU) 2015/848 and interconnect their national insolvency registers via the European e-Justice Portal;
- *Access to e-CODEX*: connecting more Member States to e-CODEX is meant to enlarge the territorial coverage where it is possible to make electronic use of the European Order for Payment and the European Small Claims instruments cross-border. Every country that becomes connected via e-CODEX enables its judicial authorities to interact electronically with citizens, business and legal practitioners across the European Union.
- *Integration of electronic multilingual standard forms into national e-government systems*: in the context of the Regulation on Public Documents, integrating the electronic versions of the multilingual standard forms into national IT systems (instead of Member States issuing the forms from the European e-Justice Portal) will make their issuance cheaper and faster and benefit both Member State administrations and citizens.

3.14.2.5 Benefits and expected outcomes specific to the actions supported in 2018

This DSI is established in order to increase the service coverage of the European e-Justice Portal by connecting additional Member State Generic Services to the existing modules of the European e-Justice Portal. As such, the benefits and outcomes specific to the actions supported in 2018 pertain to increasing the service coverage of the modules included in the DSI in 2018, namely e-evidence, Interconnection of Insolvency Registers (IRI), Access to e-CODEX and, as a new element, the integration of electronic multilingual standard forms into e-government systems.

In addition, the action for the governance and operation of the e-CODEX Core Service Platform features in the Work Programme 2018 in order to ensure appropriate management of the communication backbone that underpins all modern developments in the e-Justice area.

3.14.2.6 Governance, operations and stakeholders involvement

The European e-Justice Portal is co-managed by the European Commission and the Member States. For the European e-Justice Portal as a whole and for all its modules except *Access to e-CODEX*, the European Commission takes decisions in agreement with the Member States.

The governance body for the European e-Justice Portal is the Council e-Justice Working Party, while technical decisions are taken in the Commission e-Justice Expert Group both of which meet a few times a year. Specific expert subgroups are established for a limited duration to coordinate the implementation of some of the Portal's modules when the relevant stakeholders are not part of the e-Justice Experts' Group, or are only a small subset thereof.

For the integration of the multilingual standard forms into national IT systems pursuant to the Regulation on Public Documents, the European Commission is developing common XML schemas in agreement with the Member States. Work on IT matters is carried out within the Subgroup of European e-Justice Portal technical experts on the Public Documents Regulation. All matters relating to the application and implementation of this Regulation are discussed and agreed within the Committee on Public Documents set up pursuant to Article 23 of the Regulation on Public Documents.

In the particular case of the e-CODEX project, the governance is ensured by the Me-CODEX project until the end of 2018. A Me-CODEX-like approach, facilitated by this Work Programme, is expected to also function in 2019 and 2020 while a long-term governance model is being put into place.

The daily operation and maintenance of the European e-Justice Portal Core Service Platform is ensured by DG Justice and Consumers.

3.14.2.7 Type of financial support

The e-CODEX Core Service Platform will be financed in the form of one multi-beneficiary grant for a duration of two years.

Title:	European e-Justice DSI – e-CODEX Core Service Platform
Indicative total budget for 2018:	EUR 3 million
Type of financial support:	One multi-beneficiary grant – Call for proposals
Funding rate:	100% of eligible costs
Indicative duration of the action:	24 months
Indicative call publication date:	Q1 2018
Beneficiaries/type of consortium	The proposed consortium should be formed of Member State authorities and possibly other organisations supporting them, if justified, with the necessary complementary expertise to cover at the minimum the full set of outlined issues

Generic Services will be financed through grants. Proposals may be submitted by a single entity or a consortium of entities based in one or several Member States and/or EEA countries participating in the CEF Telecom programme. Proposals are limited to one or more Generic Services connecting to the same module. The eDelivery deployment can be part of the proposal.

This DSI is established specifically to help increase the service coverage of the European e-Justice Portal, and thus targeted only at applications seeking to develop a technical connection to the European e-Justice Portal in the context of specific modules. Furthermore, it only aims to fund a limited range of activities, i.e., actions looking to connect an otherwise existing

system and/or set of data using the specific interfaces mandated by the European e-Justice Portal. It cannot be used to fund the development of the system itself or the collection/production of the data. For all other types of e-Justice projects, whether or not related to the European e-Justice Portal, the appropriate funding tool is the yearly "Action grants to support national or transnational e-Justice projects" opened by DG Justice and Consumers.

In case of oversubscription, applications for the e-evidence module will be considered as having first priority, applications for the Interconnection of Insolvency Registers (IRI) will be considered as having second priority and applications for any of the other modules will be considered as having third priority.

Title:	European e-Justice DSI - Generic Services
Indicative total budget for 2018:	EUR 4 million
Type of financial support:	Grants – Call for proposals
Funding rate:	Up to 75% of the total eligible cost
Consortium composition:	Separate consortia for each module, formed of Member State authorities competent for the respective module and possibly other organisations supporting them, if justified
Eligible organisations:	<p>E-evidence: public administrations</p> <p>Interconnection of Insolvency Registers (IRI): national public administrations competent for or operating insolvency or commercial registers</p> <p>Access to e-CODEX: public administrations</p> <p>Integration of electronic multilingual standard forms into national e-government systems: public administrations</p>
Indicative duration of the action:	24 months
Indicative call publication date:	Q2 2018
Indicative call closing date:	Q4 2018

3.15 eArchiving

3.15.1 Background and rationale

3.15.1.1 The specific policy framework

In all Member States there are legal obligations for public institutions to keep certain data and documents in the national archives for a certain amount of time.

Taking the EU as a whole, several requirements justify the use of an EU-wide archiving solution. These include, for example:

- The PSI Directive⁸² (2003/98/EC, revised by Directive 2013/37/EU) which stipulates that if content is accessible under national law, it should be re-usable beyond the commercial and non-commercial purposes for which it was first collected. The Directive thus encourages public institutions to make public-sector information available for re-use.
- Directive 2007/2/EC laying down rules for establishing an infrastructure for spatial information in the European Community (INSPIRE). It covers spatial datasets and spatial data services, along with agreements on sharing, access and use so that EU-wide information and knowledge relevant for environmental protection can be combined.
- The Recommendation on digitisation, online accessibility and digital preservation (2011/711/EU), which invites EU Member States to exchange information on strategies and action plans for the long-term preservation of digital cultural material; to make provision in their legislation so as to allow copying and migrating digital resources for preservation purposes; and to adapt legal deposit arrangements for digital-born material.
- Regulation (EU) 2016/679 of the European Parliament and of the Council⁸³ ('the General Data Protection Regulation'), which intends to strengthen and unify data protection for citizens across the EU. It states that individuals have the right to know whether or not personal data concerning them is being processed, where and for what purpose. Further, they can request an electronic copy of the processed personal data. As a result, personal data held in archives must be adequately preserved.

The above requirements in EU legislation imply that growing quantities and many different types of information have to be retained and made available for cross-border access and (re-)use.

3.15.1.2 The contribution to the Digital Single Market

The Commission's Digital Single Market mid-term review points out that a bedrock of trust is key to building consumer and business confidence about investing in digital technologies and services, and boosting Europe's digital economy.

However, if the long-term preservation of digital assets does not become part of existing cross-border data exchange practices, valuable information risks being lost. This could result in a loss of transparency and trust in governments and public institutions, and would limit business and research opportunities. Therefore, the sustainability of digital archival content makes a vital contribution to the Digital Single Market.

⁸² <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013L0037>.

⁸³ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (OJ L 119, 4.5.2016, p. 1).

3.15.2 Implementation 2018

3.15.2.1 Baseline

The core service platform for the new eArchiving building block will be based on and continue the work delivered by the European Archival Records and Knowledge Preservation (E-ARK) project⁸⁴. The E-ARK project ran between 1 February 2014 and 31 January 2017 and was partially funded by the Commission as a type-B (i.e. not a large-scale) pilot project under its ICT policy support programme, itself part of the Competitiveness and Innovation Framework Programme.

At the core of the new eArchiving core service platform are the technical specifications and compliant software developed and piloted under the E-ARK project. All E-ARK results are available under open-source licence.

3.15.2.2 New actions in WP2018

The actions supporting this DSI aim to achieve a wider, cross-border adoption of eArchiving solutions. This requires technical support, training and testing services to complement and improve the existing technical specifications and compliant software and to create best practice guidelines for data owners.

Alongside these technology-related tasks there should be outreach and collaboration activities aimed at extending existing E-ARK solutions and at developing additional targeted interfaces, specifications and cross-border access services for a broader range of areas (e.g. healthcare, environment, finance, safety-critical systems etc.).

Core service platform

Initial actions will focus on establishing eArchiving as a new CEF building block and on releasing a first version of its core service platform. This will include the following activities:

- Technical activities and support:
 - stabilisation and harmonisation of the existing eArchiving specifications and compliant software as delivered by the E-ARK project
 - development and operation of a conformance testing service for solution and service providers implementing the eArchiving specifications
 - technical support (e.g. helpdesk, training) for the user community as a whole and specifically for parties intending to include the service in their own services/products
- Stakeholder engagement and monitoring activities:
 - dissemination and promotion of eArchiving for current and prospective users, both in the public and private sector, including national authorities and administrations
 - monitoring the uptake of the building block's service offering with regard to functionality and geographical spread
- Service administration:

⁸⁴ For more information on the E-ARK Project, please consult the following web page: <http://eark-project.com/>

- day-to-day administration and operation of the building block, including the provision of use statistics and of other information on service operation, enquiries and complaints, bug reports, change requests, etc.

Generic services

Generic services for eArchiving will not be funded by the CEF WP2018.

3.15.2.3 Use of building blocks

The eArchiving building block will be a new building block in itself. Possible synergies with other building blocks will be analysed.

3.15.2.4 Benefits and expected outcomes

With the adoption of eArchiving as a CEF building block, the number of archives using the solution is expected to increase.

A benefits analysis performed within the E-ARK project has identified short-, medium- and long-term benefits, such as:

- easier ways for data owners to exchange data between organisations and with individuals (which will help meet the data portability requirements in the General Data Protection Regulation);
- better market opportunities and increased competitiveness for IT providers, thanks to easier archival data exchange across borders;
- increased cross-border availability of commercial eArchiving services for the public and private sectors alike;
- greater government transparency as a result of improvements in eArchiving capability and public access to archived digital records;
- the ability to create new innovative services based on archived digital data;
- enhanced training and employment opportunities for staff, thanks to use of a common system;
- improved long-term storage and availability of public and private sector data.

3.15.2.5 Benefits and expected outcomes specific to the actions supported in 2018

The main goal is to launch the eArchiving core platform in full, with all functionalities available. The actions will also help widen the user base for eArchiving-compliant solutions across borders and sectors by:

- informing and educating stakeholders about the need for long-term data preservation and related issues;
- promoting, advising and supporting stakeholders in the adoption of eArchiving-compliant solutions.

In addition, the establishment of the eArchiving core service platform will help achieve a significant reduction in the cost of implementing and maintaining eArchiving solutions (e.g. economies of scale), and lead to greater efficiency.

3.15.2.6 Governance, operations and stakeholder involvement

The Commission (DSI owner) will be responsible for the set-up, operation and maintenance of the eArchiving core service platform. Governance is provided through the Operational Management Board and the Architecture Management Board. The DSI solution provider will further develop and stabilise the technical specifications and standards and will organise training and community outreach activities. National archives in the Member States will be involved through the European Archives Group (EAG)⁸⁵, which fulfils the role of a DSI Expert Group.

3.15.2.7 Type of financial support

The core service platform for this building block will be implemented through both procurement contracts and grants. The former will be used for setting up the infrastructure, for administrative support, and for monitoring and communication activities. The latter will cover technical development and standards specifications, and will involve current and prospective stakeholders alike.

Title:	eArchiving – Core Service Platform – Implementation, operation and monitoring of its uptake
Indicative total budget for 2018:	EUR 470.000
Type of financial support:	Procurement – Framework contract(s) (indicative number of contracts: 1 to 5 specific contracts)
Indicative duration of the action:	14 months
Indicative call publication date:	Q1 2018

Title:	eArchiving-Core Service Platform - stakeholder engagement, tool development and standardisation activities
Indicative total budget for 2018:	EUR 1,530,000
Type of financial support:	Grant
Funding rate:	100 % of eligible costs
Consortium composition:	Minimum of three independent organisations from at least three EU Member states or associated countries
Eligible organisations:	Public or private entities
Indicative duration of the action:	12 months
Indicative call publication date:	Q1 2018

⁸⁵ The European Archives Group is an official Commission expert group established at the beginning of 2006. It brings together representatives from national archives in EU countries. The EAG has cooperated on EU programmes such as the E-ARK project.

3.16 Interoperability hub for peer-to-peer mobile payment system

3.16.1 Background and rationale

3.16.1.1 The specific policy framework

The Euro Retail Payments Board (ERPB) is a market strategic body, chaired by the European Central Bank (ECB) with the EC (DG FISMA - Financial Stability, Financial Markets and Capital Markets Union) as observer, and National Central Banks (NCBs) as participants that groups providers and users of payments services in order to define the strategy for euro payments.

The Payment Services Directive⁸⁶ opened the market of payments in 2009 and led to the development of innovative solutions that allowed payment services users to make payments more easily thanks to applications that would link their phone number to their IBAN accounts and give them the possibility to initiate credit transfers (e.g. SEPA Credit Transfers) based on a simple phone number. However, the 50+ solutions that exist today are, in their vast majority, national solutions only, unable to offer cross-border services, contrary to the spirit of SEPA. Some of these solutions are already widely used within some of our Member States (e.g. MobilePay in DK adopted by +/-60% of the adult population, Swish in SW, Jiffy in IT, PayM in the UK) .

The Mobile Proxy Forum is the follow-up of a ERPB working group that operated in 2014 and 2015 with the objective to define the necessary requirements for cross-border EU peer-to-peer mobile payments to become reality. The Mobile Proxy Forum is open to all payment service providers interested in providing their solution cross-border.

3.16.1.2 The contribution to the Digital Single Market

The digital transformation of financial services, sits at the cross-roads of the Digital Single Market and Financial Services policy. The financial services sector being by far the largest digital sector of the economy and new digitised solutions in financial services – such as new payment solutions, are increasingly used in the digital economy and in connection to the delivery of digital services.

The importance of the digital transformation of the financial services and the emergence of innovative solutions enabled by technology (Fintech) has been stressed in the Mid Term Review of the Digital Single Market. New digital payment is one of the major activities in Fintech.

⁸⁶ Directive 2007/64/EC

3.16.2 Implementation 2018

3.16.2.1 Baseline

This is a new DSI. The Mobile Proxy Forum (MPF) is looking for a way to interconnect all Mobile P2P solutions across the EU in order to create cross-border capabilities. MPF has already elaborated technical requirements expressed in a Rulebook for a Switch that will connect databases linking mobile phone numbers and IBAN numbers across Europe. The Switch will be the Core Service Platform.

3.16.2.2 New Actions in 2018

Core Service Platform

The action in 2018 will fund the Core Service Platform with the development and first deployment of the Switch – the solution that will connect databases linking mobile phone numbers and IBAN numbers across Europe. The Switch will receive requests from domestic solutions looking for an IBAN account number corresponding to a phone number they possess. The Switch will poll markets that are likely to hold the corresponding IBAN and, once received, send back the IBAN to the requiring domestic solutions allowing it to process the payment. The work will concern:

- Technical activities:
 - Finalisation of the specifications based on the existing Rulebook already produced by MPF.
 - Development operational validation and running of the Switch.
- Support to stakeholder engagement activities:
 - Support stakeholders that wish to use the Switch
 - Dissemination activities for actual and prospective users,
- Service administration:
 - Day-to-day administration and operation of the Switch,
 - Monitoring the use of the Switch.

Beyond the activities depicted above, all other activities related to the Switch will be funded by the Mobile Proxy Forum.

Generic services

consisting of the connection of the domestic solutions to the Core Service Platform – will not be funded under WP2018

3.16.2.3 Use of Building Blocks

The Mobile Proxy Forum (MPF) will reuse one Building Block, notably e-Delivery has been assessed as suitable. Other Building Blocks could also be used.

3.16.2.4 Benefits and expected outcomes

The DSI will lead to the creation of interoperable cross-border online services. It will improve the functioning of internal market allowing payment services users to access and reach the

entire market through a single solution instead of having to register in each and every country where they are willing to pay.

Today Member States have at least one P2P solution running domestically. Most of these solutions are limited to their domestic markets, and most are even not interoperable with other domestic solutions. With this DSI, citizens that are registered with one participating operator can potentially make payments to any other citizens across Europe as long as they are registered with the other participating operators. The potential market size for cross-border P2P mobile payments could reach 100 million transactions annually.

The primary focus of a hub for peer-to-peer mobile payments is to allow the sending of payments between individuals using different service providers. A typical use case would be the reimbursement of a restaurant bill through a peer-to-peer solution instead of cash. This was the first step taken by all the current solutions on the market in order to gain a user base. The second step, already taken in some Member States, will be the opening of the payments to merchants allowing consumers to pay merchants more easily through their mobile domestically or cross-border.

Such an EU interoperable payment solution can potentially be used for a countless number of services. Additional benefits could be seen in a decrease of cash (or even cheques in some Member States) as peer-to-peer solution are a usual substitute to that kind of payments.

3.16.2.5 Benefits and expected outcomes outcomes specific to the actions supported in 2018

The action launched in 2018 will support the development and operational setting of the Switch that will enable the first implementation of cross-border P2P mobile payments. The solution will continue to be exploited beyond the action.

The action supported in 2018 is aimed at attracting new operators, in addition to those already involved in the Mobile Proxy Forum, in order to widen of the user base of P2P payments across Europe. It will be done notably by: informing and promoting the solution and its use by operators, stakeholders and end users.

3.16.2.6 Governance, operations and stakeholders involvement

The Interoperability hubs for P2P payment system will be managed by the Mobile Proxy Forum under the supervision of the ERPB involving the European Central Bank, the European Commission and National Central Banks. The development of the Switch should be mandated by the Mobile Proxy Forum and comply with the requirements expressed in their Rulebook.

3.16.2.7 Type of financial support

The Core Service Platform will be implemented through one grant agreement . The applicants should be endorsed by the MPF.

Title:	Interoperability hub for P2P payment system
Indicative total budget for 2018:	EUR 1 million
Type of financial support:	Grant up to 75%
Indicative duration of the action:	12 months

Indicative call publication date: Q1 2018

4 CONTENT OF THE WIFI4EU CALLS FOR 2018

4.1.1 Background and rationale

The Commission Communication of 14 September 2016 '*Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society*', sets out a European vision of Internet connectivity for citizens and businesses in the Digital Single Market and announces a number of possible measures to improve connectivity in the EU.

These measures include a support scheme to encourage the provision of free Wi-Fi access to citizens in indoor or outdoor public spaces (e.g. public administrations, schools, libraries, health centres, museums, public parks and squares). This will better integrate communities into the Digital Single Market, give users a taste of the Gigabit society, improve digital literacy and complement the public services provided in those spaces.

On 25 October , Regulation (EU) 2017/1953 was adopted.

The WiFi4EU initiative will support public sector bodies⁸⁷ offering wireless connectivity in the centres of local public life (e.g. public administrations, libraries, health centres and outdoor public spaces) that is free of charge and without discriminatory conditions as an ancillary service to their public mission.

To this end, it provides financial incentives in favour of those entities that want to provide free, high-capacity local wireless connectivity and digital services to their citizens and visitors within their jurisdiction. Actions duplicating existing free private or public offers with similar characteristics (e.g. quality of service) in the same public space will not be eligible for funding.

The initiative promotes public interest in innovative internet services and thus seeks to boost both the take-up of commercial high-speed broadband and public infrastructure development. It aims to contribute towards digital inclusion, improve coverage in disadvantaged areas, bolster mobility and promote digital literacy. It also promotes the use of services offered by entities with a public mission.

4.1.2 Implementation 2018

4.1.2.1 Implementation mechanisms

Article 7 of the CEF Regulation states that "*actions in the field of providing local wireless connectivity that is free of charge and without discriminatory conditions in local communities shall be financed through grants or other forms of financial assistance, not including financial instruments*".

Article 9 of the CEF Regulation stipulates that "*Where justified by the need to avoid an undue administrative burden, in particular in the case of low value grants within the meaning of Article 185 of Delegated Regulation (EU) No 1268/2012, the Member States referred to in paragraph 1 of this Article may agree to a category of proposals under the work programmes adopted pursuant to Article 17 of this Regulation, without indicating individual applicants.*

⁸⁷ As defined in Directive (EU) 2016/2102 of the European Parliament and of the Council

Such an agreement shall eliminate the need for Member States to provide an agreement to each individual applicant."

Lastly, Article 10(4) of the CEF Regulation states that "*Actions in the field of providing local wireless connectivity that is free of charge and without discriminatory conditions in local communities shall be funded by Union financial assistance covering up to 100 % of the eligible costs, without prejudice to the principle of co-financing*".

The WiFi4EU initiative will be implemented through a voucher scheme. It is envisaged that five calls for applications resulting in grants (or other forms of financial assistance other than financial instruments) will support local wireless connectivity projects until 2020.

The initiative will be designed as a project promoter-friendly, delivered through online forms, allowing for fast deployment, agile application, audit and monitoring requirements.

More information is provided below, in Section 5 and Annex 3. Detailed information will be provided upon publication of the calls.

4.1.2.2 Actions to be started in 2018

Call for applications

This Work Programme will cover the second and third WiFi4EU calls for applications. Applicants eligible for the calls will be municipalities or associations formed by municipalities as further described in Section 5.4.

Registration will be online and user-friendly; it will require the minimum of information needed to establish a list of selected projects.

Registration will open several weeks before the call is formally launched. Potential applicants for a WiFi4EU voucher will therefore have sufficient time to fill in and save very simple online forms within the WiFi4EU portal, but they will not be able to formally submit their application to the European Commission until the launch date for the call.

During this period, municipalities (or their associations) will also be encouraged to interact with Wi-Fi installation companies to consider the scope of their potential Wi-Fi project.

To facilitate this dialogue, Wi-Fi installation companies interested in the scheme are invited to register on the WiFi4EU portal and declare their commitment to fulfil a number of technical and legal requirements set by the European Commission. Through the WiFi4EU portal, potential applicants will therefore have access to the list of Wi-Fi installation companies that have already registered and that have declared that they are operating in their local area. Any Wi-Fi installation company operating in the EU will be able to register on the WiFi4EU portal at any time (*i.e.* before or after the calls). Beneficiaries of the vouchers (*i.e.* the successful applicants) will be free to select the installation company of their choice, including those not yet registered on the WiFi4EU portal at the time of their public tender. Once selected by a beneficiary for their local wireless connectivity project, Wi-Fi suppliers should register on the WiFi4EU portal.

After the call for applications

Soon after the call for applications is closed, beneficiaries will receive the WiFi4EU voucher. They will then need to define and procure their local Wi-Fi installation projects in accordance with the applicable procurement rules.

The vouchers will only cover capital expenditure costs, while operational expenditure costs, such as connection to an internet service provider (ISP), must be borne by the beneficiaries themselves for at least three years. The European Commission does not intervene in the contractual relationship between the beneficiary and its internet service provider.

The vouchers may cover up to 100 % of the purchase of equipment and its installation cost (CAPEX), up to a certain limit (expected to be around EUR 15.000) without prejudice to the principle of co-financing. The voucher scheme will be implemented in accordance with the financial regulations⁸⁸.

Beneficiaries will have 18 months to procure and complete their local Wi-Fi installation. On completion, the WiFi4EU voucher will be transferred to the Wi-Fi installation company, which can then request payment of the voucher to the Commission.

4.1.2.3 Benefits and expected outcomes

The number of beneficiaries for the 2018 calls is expected to be around 2,500 municipalities from across the EU. The initiative will provide high-quality Internet access to local residents and visitors in the main centres of local community life such as parks, squares, public libraries or public buildings.

Such local wireless connectivity that is free of charge and without discriminatory conditions is expected to help bridge the digital divide, especially in communities that lag behind in terms of digital literacy, including in rural areas and remote locations.

It should further increase access to online services that improve quality of life in local communities by making services like e-health and e-government more accessible, and promote the growth of local small and medium-sized businesses innovating in digital products and services.

The initiative will provide a single authentication system (the "sign-in once" principle) to end-users throughout the EU.

4.1.2.4 Type of financial support

The WiFi4EU calls for applications will be financed through grants or other forms of financial assistance (other than financial instrument). Applications may be submitted by a municipality or an association formed by municipalities on behalf of one or more of its members in all Member States and/or EEA countries participating in the CEF Telecom programme.

⁸⁸ Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 and Commission Delegated Regulation (EU) No 1268/2012 of 29 October 2012 on the rules of application of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union, *OJ L 298*, 26.10.2012, p. 1–96

Title:	WiFi4EU
Indicative total budget for 2018:	EUR 49.550 million
Type of financial support:	grants – vouchers
Funding:	around EUR 15 000 per voucher. The exact amount is subject to an analysis of current market practices by the Commission
Eligible organisations:	municipalities and associations formed by municipalities
Indicative duration of the action:	24 months
Indicative call publication date:	Call 2: Q2/Q3 2018; Call 3: Q4 2018/Q1 2019
Indicative call closing date:	Call 2: Q2/Q3 2018; Call 3: Q4 2018/Q1 2019

5 IMPLEMENTATION

5.1 Main implementation measures and EU financial contribution

The different nature and specificities of the DSIs detailed in Section 3 require distinctive implementation measures. Each of these will therefore be achieved either through calls for proposals resulting in grant agreements, or through procurement actions as specified in Section 3.

WiFi4EU actions will be implemented through calls for proposals resulting in vouchers as indicated in Section 4.

For all measures implemented via calls for proposals, the EU funding is granted in accordance with the principles of co-financing and non-profit for the funded activities in compliance with the European Union Framework for State Aid for Research and Development and Innovation⁸⁹. EU grants will be calculated on the basis of eligible costs. Details of eligible costs can be found in the model grant agreement, which is available on the CEF Telecom call pages of the Innovation and Networks Executive Agency (INEA) website (<https://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/apply-funding>). The financial assistance will respect the maximum co-financing rate limit of the CEF Regulation amended by Regulation (EU) 2017/1953: 75% for the DSI grants and 100% for the WiFi4EU vouchers. Specific eligibility criteria will be specified in the relevant calls for proposals.

The Wifi4EU initiative will be implemented through calls for applications resulting in grants (or other forms of financial assistance other than financial instruments) supporting local wireless connectivity projects.

5.2 Procurement

Procurement actions will be carried out in compliance with the applicable EU public procurement rules. As per Section 3 of this Work Programme, procurement can be achieved either through direct calls for tenders or by using existing framework contracts.

5.3 Calls for proposals for the DSI Generic Services

5.3.1 General terms and provisions

Proposals must be submitted by one or more Member States or, with the agreement⁹⁰ of the Member States concerned, by international organisations, joint undertakings, or public or private undertakings or bodies established in Member States.

European Free Trade Association (EFTA) countries which are members of the European Economic Area (EEA) may also participate⁹¹ in accordance with the conditions laid down in the EEA Agreement. Therefore, even when not explicitly mentioned in the WP text, it is

⁸⁹ OJ C 323, 30.12.2006, p. 1.

⁹⁰ As indicated in Art.9.1 of the CEF Regulation.

⁹¹ According to article 7.2 of Regulation (EU) No 283/2014 of the European Parliament and of the Council of 11 March 2014 on guidelines for trans-European networks in the area of telecommunications infrastructures and repealing Decision No 1336/97/EC.

intended that all calls for proposals are also opened to EEA countries based on the Decisions taken by the EEA Joint Committee⁹², with the same rights and obligations as a Member State.

In addition, acceding States and candidate countries benefiting from a pre-accession strategy may participate in the CEF Telecom in accordance with agreements signed with the Union⁹³.

Proposals may be submitted by entities which do not have legal personality under the applicable national law, provided that their representatives have the capacity to undertake legal obligations on their behalf and offer a guarantee for the protection of the Union's financial interests equivalent to that offered by legal persons.

Proposals submitted by natural persons will not be eligible.

Where necessary to achieve the objectives of a given project of common interest and where duly motivated, third countries and entities established in third countries may participate in actions contributing to the projects of common interest. They may not receive funding under this Regulation, except where it is indispensable to achieve the objectives of a given project of common interest.

5.3.2 Submitting a proposal

Proposals should be submitted in accordance with the procedure defined in the call text. A Guide for Applicants containing full details on how to submit a proposal as well as all of the call documentation and background information pertaining to each call is available on the INEA website.

5.3.3 Evaluation process

The evaluation of proposals will be based on the principles of transparency and equal treatment. It will be carried out by the Commission services with the assistance of independent experts. Three sets of criteria (eligibility, award and selection) will be applied to each submitted proposal. The three sets of criteria are described in detail in Annex 2 of this Work Programme.

Only proposals meeting the requirements of the eligibility criteria will be evaluated further.

Each of the eligible proposals will be evaluated against the award criteria, while each individual applicant must demonstrate their financial and operational capacity to carry out the proposed action or work programme.

Proposals responding to a specific DSI as defined in Section 3 of this Work Programme will be evaluated both individually and comparatively. The comparative assessment of proposals will cover all proposals responding to the same DSI Generic Services call.

Proposals that achieve a score greater than or equal to the threshold will be ranked within the objective. These rankings will determine the order of priority for funding. Following evaluation of award criteria, the Commission establishes a Selection Decision taking into account the scores and ranking of the proposals, the programme priorities and the available budget. In case it is specified in the DSI description that *only one proposal per Member State*

⁹² At the moment of writing these are Norway and Iceland.

⁹³ It is to be noted that at the time of writing no country in this situation has signed any agreement, so their participation is subject to the third countries criteria.

will be selected, only the proposal with the higher ranking will be selected in case more proposals from a same Member State have passed the threshold. The Selection Decision will include proposals to be invited to prepare the Grant Agreement.

The coordinators of all submitted proposals will be informed in writing about the outcome of the evaluation for their proposal(s).

5.3.4 Selection of independent experts for evaluation and reviews

The Commission/INEA will select independent experts to assist with the evaluation of proposals and with the review of project results as well as for other purposes where specific expertise might be required for implementation of the CEF Programme. Experts are invited to apply using the mechanisms and tools provided for in the H2020 Framework Programme⁹⁴ and a list of experts appropriate to the requirements of the CEF Telecom and each individual call area will be established. Experts will be selected from this list on the basis of their ability to perform the tasks assigned to them, taking into account the thematic requirements of the call or project, and with consideration of geographical and gender balance.

5.3.5 Indicative implementation calendar

The indicative calendar for the implementation of CEF Telecom DSI calls in 2018 is shown in the table below. The Commission expects to issue calls for proposals in accordance with this 2018 Work Programme.

More information about these calls is available on the INEA website via the following link: <http://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/apply-funding>.

Date	Event
Q1	WP published, Call 1 opens
Q2	Call 1 closes
Q2	Call 2 opens
Q2	Call 3 opens
Q3	Call 2 closes
Q2 – Q3	Evaluation Call 1
Q4	Evaluation Call 2
Q4	Info to applicants for Call 1
Q4	Call 3 closes
Q1 2019	Evaluation Call 3
Q1 2019	Info to applicants for Call 2
Q1 2019	Grant Agreements signed for Call 1
Q2 2019	Grant Agreements signed for Call 2
Q2 2019	Info to applicants for Call 3
Q3 2019	Grant Agreements signed for Call 3

⁹⁴ <http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>

5.4 Calls for applications for the WiFi4EU initiative

The WiFi4EU initiative will support public sector bodies, as defined in Directive (EU) 2016/2102 of the European Parliament and of the Council⁹⁵, to offer local wireless connectivity that is free of charge and without discriminatory conditions as an ancillary service to their public mission.

For the calls, within this framework, only applications submitted by municipalities or associations formed by municipalities (acting on behalf of one or more of its members) will be eligible. In accordance with Article 9 of the CEF Regulation, the Member States should give their agreement to categories of proposals from such public bodies.

As regards the concept of "*municipalities*", the Commission therefore envisages to consider that entities in the list composed of the Local Administrative Units of level 2 (LAU 2, formerly NUTS level 5)⁹⁶ as defined by Eurostat, are eligible. The Member States will be requested, before each call, to confirm their agreement or propose modifications to this list for their territory. As regards the "*associations formed by municipalities*", the Member States will be similarly requested to indicate the categories of public bodies they consider to fulfil this definition in their jurisdiction.

The initiative will be designed as project promoter-friendly, delivered through an online website and vouchers, allowing for a fast deployment, agile application, audit and monitoring requirements.

Potential applicants will be able to register online on a dedicated website ahead of the launch of the call. On the day of the launch of the call, the "submit" functionality will be activated to allow applicants to compete on a fair and equal basis with all other applicants.

The portal will also provide other useful information to potential applicants, notably the list of Wi-Fi installation companies operating in their region having declared the fulfillment of the legal and technical requirements of the initiative and therefore considered accredited under the scheme.

The grants, designed as simple vouchers, will in principle be allocated on a "first come, first served" basis, subject to the requirement of the balanced geographical distribution as further provided for in Annex 3. This will reduce to a minimum any delay in the selection of the applications to be funded. Such an approach is justified by the small value of the EU support, which will be determined for each Member State in the call for applications.

Funding in the form of a voucher will be attributed to selected applications until the budget of the call for applications is exhausted.

The validity of vouchers will be limited to 1.5 years from the date of issuance by the European Commission.

⁹⁵ Directive (EU) 2016/2102 of the European Parliament and of the Council of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies (OJ L 327, 2.12.2016, p. 1).

⁹⁶ See: <http://ec.europa.eu/eurostat/web/nuts/local-administrative-units>

6 PROGRAMME SUPPORT ACTIONS

6.1 Studies, communication and other measures

The legal bases foresee the possibility for studies and programme support actions in the field of broadband and digital service infrastructures aimed at maximising the impact of the EU intervention. Horizontal actions for 2018 will cover costs including preparation, evaluation, monitoring and studies. An amount of funding will be set aside to cover awareness and dissemination as it is crucial to effectively communicate about the value and benefits of CEF.

Studies

Studies might cover:

- Support to deployment of DSI solutions in specific cases;
- Identification of new technologies with potential to be included in the DSIs deployment;
- Broadband benchmarking and other Broadband relevant activities;
- Synergies with other EU initiatives;
- Support for adaptations to the Cybersecurity DSI;
- Support to identification of possible new DSIs and evaluation of their maturity.

The Commission plans to procure via framework contracts and call for tenders indicatively 4 study contracts. The calls for tenders (or use of framework contracts) are indicatively planned to be launched in the second and third calendar quarter of 2018. Indicatively 2 direct new contracts and 2 specific contracts under existing framework contracts will be used.

Total indicative budget: EUR 470 000 from budget line 09 03 03 and EUR 717 674 from budget line 09 03 01.

Communication activities

- The Commission plans to procure via framework contracts and/or call for tenders communication activities to foster deployment, take-up and usage of the Digital Services offered by CEF. Envisaged communication actions will have to build and complement on the already existing ones. Indicatively 1 specific contract under existing framework contracts will be used.

Total indicative budget: EUR 180 000 from budget line 09 03 03.

- Communication for WiFi4EU

Total indicative budget: EUR 100 000 from budget line 09 03 04.

Other

- Maintenance of the expert management IT tools and the TENtec computerised data information system used in CEF Transport to CEF Telecom involving all stakeholders, providing an interactive beneficiary platform.

Total indicative budget: EUR 100 000 from budget line 09 03 03.

- Support to DSI proposals evaluation and project reviews⁹⁷.

Total indicative budget: EUR 385 215 from budget line 09 03 03.

6.2 Broadband Technical Assistance

Broadband Technical Assistance will provide guidance to potential project promoters on rolling-out high speed broadband. Amongst its activities, Broadband Technical Assistance will promote, and advise on, the use of financial instruments, including those available under CEF. In particular, Broadband Technical Assistance will promote potential voluntary ring-fenced contributions from ESI funds and national budgets to CEF. Thus, Broadband Technical Assistance will contribute to the improvement of the accessibility of EU-level financial instruments, including CEF, in order to maximise the efficiency and impact of public funding. The facility will be implemented in close co-operation with the European Investment Advisory Hub⁹⁸ to ensure coherence and efficiency in the use of EU funds.

The Support Facility of Broadband Technical Assistance will coordinate and facilitate the operations of Broadband Technical Assistance contact points designated or recruited out of the ESIF Programmes' for technical assistance and located within existing administrative structures.

The Support Facility for the Broadband Competence Offices⁹⁹ network will be partially funded under the present Work Programme through procurement. An indicative budget of the Support Facility will be EUR 3 million for a contract duration of three to four years, of which the contribution from the CEF Telecom Programme will be up to EUR 1 million. The remainder of the budget, not covered under this Work Programme, will be provided from Technical Assistance resources available under European Agricultural Fund for Rural Development (EAFRD) and European Regional Development Fund (ERDF). Indicatively 1 direct new contract and 1 specific contract under existing framework contracts will be used.

Broadband Technical Assistance contact points will not be financed under this Work Programme.

Total indicative budget: EUR 333 000 from budget line 09 03 01

6.3 WiFi4EU support measures

The WiFi4EU initiative is designed as project promoter-friendly, delivered through online vouchers, allowing for fast deployment, and for flexible application, audit and monitoring requirements.

⁹⁷ In accordance with Article 204 of the Financial Regulation

⁹⁸ The European Investment Advisory Hub (EIAH) is one of the windows of the European Fund for Strategic Investments which aims to enhance the environment for investment by addressing the main financial and non-financial obstacles. It provides a single point of entry to a wide range of advisory and technical assistance programmes and initiatives for public and private beneficiaries, provided by high-level experts, as well as cooperation platform to leverage, exchange and disseminate expertise among the EIAH partner institutions and beyond.

⁹⁹ As announced in Section 4.5 of the Commission Communication "Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society", COM(2016) 587 final, 14.9.2016.

A WiFi4EU web portal for local public authorities and Wi-Fi installation companies and internal Commission operations supports the processes underpinning the WiFi4EU voucher scheme.

The scope of the IT operations and evolutionary maintenance includes:

- IT operations and evolutionary maintenance for the **WiFi4EU portal**, including dedicated sub-sections for **local public authorities** (registration, application and selection of beneficiaries), for **Wi-Fi installation companies** (registration and accreditation for delivery of WiFi4EU networking equipment), for the **location of the WiFi4EU hotspots** (once set up by the local public authorities having been awarded a WiFi4EU voucher), and for the **Commission** (management of the voucher scheme). The WiFi4EU portal will be made available in all official EU languages;
- IT operations and evolutionary maintenance for **specific applications** including for **Wi-Fi installation companies** to provide details of the access points and for **end-users of the free public WiFi4EU hotspots**. These applications should also facilitate network monitoring and enable the local public authorities offering the service to customise landing pages.

The key success criteria for the IT infrastructure are clearly defined: they concern user-friendliness for all users (focusing on the user-experience of local public authorities/beneficiaries). The actions under WP2018 provide for the main IT evolutionary maintenance, including development based on the experience with the first call(s). Further IT operations and maintenance are expected to cover the full lifetime of the WiFi4EU initiative, they include maintenance of the IT environment, infrastructure for cloud hosting and the helpdesk.

Total indicative budget: EUR 450.000 from budget line 09 03 04

7 FURTHER INFORMATION

For further information relating to this programme, please refer to the CEF Telecom website at <https://ec.europa.eu/digital-agenda/en/connecting-europe-facility>.

ANNEXES

Annex 1 – Call for proposal fiches (Generic Services)¹⁰⁰

- Call identifier: CEF-TC-2018-1
 - Opening date: 22 February 2018 ¹⁰¹
 - Closing date: 3 May 2018 ¹⁰²
 - Subject area: Europeana, Safer Internet, eID and eSignature
 - Eligibility and admissibility conditions: The conditions are described in Annex 2 to this Work Programme and will be further explained in the call text
 - Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in Annex 2 to this Work Programme.
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- Call identifier: CEF-TC-2018-2 and CEF-TC-2018-3 (Cybersecurity)
 - Opening date: 3 May 2018 ¹⁰³
 - Closing date: 11 September 2018 ¹⁰⁴ (22 November for Cybersecurity)
 - Subject area: Cybersecurity, Public Open Data, Automated Translation, eDelivery, eInvoicing
 - Eligibility and admissibility conditions: The conditions are described in Annex 2 to this Work Programme and will be further explained in the call text.
 - Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in Annex 2 to this Work Programme.
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- Call identifier: CEF-TC-2018-4
 - Opening date: 28 June 2018 ¹⁰⁵
 - Closing date: 22 November 2018 ¹⁰⁶
 - Subject area: eHealth, ODR, eProcurement and European e-Justice Portal
 - Eligibility and admissibility conditions: The conditions are described in Annex 2 to this Work Programme and will be further explained in the call text.
 - Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in Annex 2 to this Work Programme.

¹⁰⁰ Dates are indicative

¹⁰¹ The Director-General responsible for the call may publish it up to one month prior of after the envisaged date of publication.

¹⁰² The Director-General responsible may delay this deadline by up to two months.

¹⁰³ The Director-General responsible for the call may publish it up to one month prior of after the envisaged date of publication.

¹⁰⁴ The Director-General responsible may delay this deadline by up to two months.

¹⁰⁵ The Director-General responsible for the call may publish it up to one month prior of after the envisaged date of publication.

¹⁰⁶ The Director-General responsible may delay this deadline by up to two months.

Annex 2 – Evaluation criteria for the Calls for Proposals – Digital Service Infrastructures

Admissibility conditions

To be considered admissible, a proposal must be:

- Submitted on time: proposals must be submitted by the date and time and through the submission means specified in the relevant call for proposals. Proposals must be submitted only as specified in the call: either electronically or on paper. The call deadline is a deadline for receipt of proposals (in the case of proposals submitted by post or courier services it is the date of sending by applicants).
- Complete: all requested information must be submitted by the call deadline, including the requested administrative data, signature(s) of the applicant(s), all application forms and their respective annexes (if applicable) and any supporting document(s) specified in the call for proposals. Incomplete proposals may be considered as inadmissible.

Eligibility criteria

Proposals will be eligible if they meet the following criteria:

- The proposal must include the agreement of the concerned Member State(s) as indicated in Art.9.1 of the CEF Regulation¹⁰⁷.
- The composition of the proposing consortium complies with the requirements set out in this Work Programme and call text.
- The proposal is submitted by legal persons as referred to in section 4.3.1.

Exclusion criteria

- Applicants must certify that they are not in any of the situations listed below:
 - i. they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
 - ii. they or persons having powers of representation, decision-making or control over them have been convicted of an offence concerning their professional conduct by a judgment of a competent authority of a Member State which has the force of res judicata;

¹⁰⁷ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010.

- iii. they have been guilty of grave professional misconduct proven by any means which the contracting authority can justify including by decisions of the EIB and international organisations;
- iv. they are not in compliance with their obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the contracting authority or those of the country where the contract is to be performed;
- v. they or persons having powers of representation, decision-making or control over them have been the subject of a judgment which has the force of res judicata for fraud, corruption, involvement in a criminal organisation, money laundering or any other illegal activity, where such illegal activity is detrimental to the Union's financial interests;
- vi. they are subject to a financial or administrative penalty referred to in Article 109(1) of the Financial Regulation;
- vii. they are subject to a conflict of interests;
- viii. they are guilty of misrepresenting the information required by the contracting authority as a condition of participation in the procurement procedure or have failed to supply that information.

Proposals failing to meet the above criteria are not accepted for further evaluation.

Selection criteria

Applicants must demonstrate their financial and operational capacity to carry out the proposed action.

Award criteria

The proposals will be evaluated on the basis of three criteria: 'Relevance', 'Quality and efficiency of the implementation' and 'Impact', further described below:

Relevance

- Alignment with the objectives and activities required for the deployment of the Digital Service Infrastructure described in Section 3 and further specified in the call for proposals.
- Alignment and synergies with EU long-term policy objectives, relevant policies, strategies and activities at European and national level.

Quality and efficiency of the implementation

- Maturity of the proposed solution (e.g. in terms of contribution towards interoperability, connectivity, sustainable deployment, operation, upgrading of trans-European digital service infrastructures, use of common Building Blocks, coordination at European level) and/or integration with existing components of the DSI.
- Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources.

- Quality and relevant experience of the individual participants and, if more than one beneficiary, of the consortium as a whole (including complementarity, balance).
- Extent to which the proposal demonstrates support from national authorities, industry and NGOs (when relevant).
- Appropriate attention to security, privacy, inclusiveness and accessibility (when relevant).

Impact and sustainability

- Quality of the approach to facilitate wider deployment and take-up of the proposed actions.
- Capability to survive, develop and scale up without European Union funding after the end of the project with a view to achieving long-term sustainability, where appropriate through funding sources other than CEF.

A score will be applied to each of the three award criteria. If a proposal fails to achieve one or more of the threshold scores (see below), feedback will be provided to the consortium on the reason(s) for failure.

Proposals that are outside the scope of the Work Programme objectives will be marked ‘0’ for the Relevance criterion — with the comment ‘out of scope of the call’; they will not be further evaluated.

For each award criterion a score from 0 to 5 points is given (half points possible):

0. Insufficient: The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.
1. Poor: The criterion is inadequately addressed, or there are serious inherent weaknesses.
2. Unsatisfactory: The proposal broadly addresses the criterion, but there are significant weaknesses.
3. Good: The proposal addresses the criterion well, but a number of shortcomings are present.
4. Very Good: The proposal addresses the criterion very well, but a small number of shortcomings are present.
5. Excellent: The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

Scoring: unless otherwise specified in the call conditions:

For all proposals, each criterion will be scored out of 5. The threshold for individual criteria will be 3. The overall threshold, applying to the sum of the three individual scores, will be 10.

Priority order for proposals with the same score

Unless the call conditions indicate otherwise, the following method will be applied:

At the end of the evaluation by independent experts, all the proposals under evaluation for a same call will be ranked, according to the scores obtained for of each of the award criteria as indicated above.

If necessary, a priority order for proposals which have obtained the same score within a ranked list will be determined. Whether or not such a prioritisation is carried out will depend on the available budget or other conditions set out in the call text. The following approach will be applied successively for every group of *ex aequo* proposals requiring prioritisation, starting with the highest scored group, and continuing in descending order:

- i. Proposals submitted by organisations established in an eligible country which is not otherwise covered by more highly-ranked proposals, will be considered to have the highest priority (geographical coverage).
- ii. The proposals identified under (i), if any, will themselves be prioritised according to the scores they have been awarded for the *relevance* criterion. When these scores are equal, priority will be based on scores for the *impact and sustainability* criterion.

If a distinction still cannot be made, a further prioritisation can be done by considering the overall project portfolio and the creation of positive synergies between projects, or other factors related to the objectives of the call or to the CEF in general. These factors will be documented in the evaluation report.

Annex 3 - Evaluation criteria for the Calls for Applications – WiFi4EU initiative

Admissibility conditions

To be considered admissible, an application must meet the following conditions:

- It must be submitted within the deadline: applications must be submitted during the application period specified for each call. Applications will be submitted electronically through the WiFi4EU portal.
- It must be complete: all requested information must be submitted by the call deadline. Incomplete applications will be considered as inadmissible.

Eligibility criteria

In line with Section IV of the Annex to Regulation (EU) No 283/2014 of the European Parliament and of the Council¹⁰⁸

Actions taken for the provision of local wireless connectivity will be eligible for funding if they:

- (1) are implemented by a public sector body, as defined in point (1) of Article 3 of Directive (EU) 2016/2102, which is capable of planning and supervising the installation, as well as ensuring for a minimum of three years the financing of operating costs, of indoor or outdoor local wireless access points in public spaces;
- (2) build on high-speed broadband connectivity enabling delivery of a high-quality internet experience to users that:
 - a) is free of charge and without discriminatory conditions, easy to access, secured, and uses the latest and best equipment available, capable of delivering high-speed connectivity to its users;
 - b) supports access to innovative digital services, such as those offered via digital service infrastructures;
 - c) for the purpose of accessibility, provides access to services at least in the relevant languages of the Member State concerned and, to the extent possible, in other official languages of the institutions of the Union;
 - d) is provided in centres of local public life, including outdoor spaces accessible to the general public that play a major role in the public life of local communities.

¹⁰⁸ Regulation (EU) No 283/2014 of the European Parliament and of the Council of 11 March 2014 on guidelines for trans-European networks in the area of telecommunications infrastructure and repealing Decision No 1336/97/EC (OJ L 86, 21.3.2014, p. 14)

- (3) use the common visual identity to be provided by the Commission and link to the associated online tools;
- (4) respect the principles of technological neutrality at the level of the backhaul, the efficient use of public funding and the ability to adapt projects to the best technological offers;
- (5) commit to procure the necessary equipment and/or related installation services in accordance with applicable law to ensure that projects do not unduly distort competition.

Furthermore, as stated in Article 9(1a) of the CEF Regulation¹⁰⁹, in order to avoid an undue administrative burden and to eliminate the need for agreement on each applicant, in advance of the call, the Member State concerned has agreed to the categories of beneficiaries (municipalities or associations formed by municipalities) set out in Section 5.4, or has notified the Commission otherwise.

Exclusion criteria

Applications duplicating existing free private or public offers with similar characteristics, including quality, in the same public space will not be eligible for funding.

- Such duplication may be avoided by the commitment by beneficiaries and Wi-Fi installation companies participating in the scheme that the range of the access points funded under this scheme will be designed to cover primarily public spaces and not to overlap with that of existing private or public offers with similar characteristics.

Selection and award criteria

The available budget will be allocated in a geographically balanced manner across Member States and EEA countries participating in the CEF Telecom programme. It will be allocated to actions meeting the conditions set out in this section, taking account of the eligible applications received in each call and in principle on a 'first come, first served' basis defined as the order of submission as recorded by the Commission's IT system.

The vouchers will in principle be allocated on a first-come, first-served basis. However, to ensure a balanced geographical distribution of the financing, the following criteria will be used to select the applications:

- Funds shall be allocated only to eligible applications received under each call, regardless of the maximum and minimum threshold described below;
- Each municipality may only benefit from one voucher during the entire duration of the initiative;
- A minimum amount of 15 vouchers per Member State and per EEA country participating in the CEF Telecom programme will be allocated in each call for

¹⁰⁹ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010.

applications, provided sufficient applications are received from applicants in that Member State or EEA country;;

- A maximum of 8% of the indicative budget is available for a given call to any Member State or EEA country participating in the CEF Telecom programme.
- The total allocation of funds under each call will cover all Member States or EEA countries participating in the CEF Telecom programme from which eligible applications are received.

In light of the outcome of previous calls, and to the extent necessary to secure the underlying objective of balanced geographical distribution, the Commission may adapt these criteria through an amendment of the Work Programme.

Annex 4 – Conformity with the legal base

The DSI objectives described in Sections 3 and 6 refer to the kind of actions that can be provided for under the CEF Telecom as defined in Article 4 of the CEF Regulation.