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ANNEX

ANNEX

to the

COMMISSION IMPLEMENTING DECISION

**on establishing a Multi-Annual Work Programme 2019 and 2020 for financial assistance
in the field of Connecting Europe Facility (CEF) Telecommunications sector**

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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 the 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 2019 work programme (WP2019) 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 2019 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 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 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 the European economy and society. In this context, CEF DSIs are 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 two years after 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 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 support 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 early 2019.

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

The importance of the CEF Telecom programme for modernising public administration has also been recognised by Member States in the Tallinn Declaration on eGovernment¹³, where they commit to enhance the re-use of the CEF infrastructures - in particular eID, eSignature, eDelivery, eProcurement and eInvoicing – and to promote their implementation in more domains.

The importance of data as an enabling factor that changes the way we produce goods, deal with various societal issues and live our daily lives is now widely recognised. It is estimated¹⁴ that if the right framework conditions are put in place, the European data economy could grow from EUR 335 billion, representing 2.4 % of the GDP in 2017, to over EUR 1,000 billion in EU28 by 2025, representing 6 % of the overall EU GDP. The Commission's 2018 Data Package¹⁵ seeks to create a seamless digital area, a common European data space, and to unlock the re-use potential of different types of data. The infrastructure made available thanks to the Public Open Data DSI will play an important role in reaching this ambition.

In September 2017, the Commission launched an updated package of initiatives on cybersecurity via the Joint Communication "*Resilience, Deterrence and Defence: Building strong cybersecurity for the EU*"¹⁶. This recognised that in tandem with growing digitalisation and the associated benefits of a connected economy and society, including those derived from objects connected 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 a risk of 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 this context, it is essential that support be provided through CEF for the further development of cybersecurity capabilities. This will reinforce the proposed creation of a Network of Cybersecurity Competence Centres and a new European Cybersecurity Industrial, Technology and Research Competence Centre to invest in stronger and pioneering cybersecurity capacity in the EU, with an appropriate emphasis on deployment. Indeed CEF is laying the ground work for the forthcoming Digital Europe Programme by facilitating the upscaling of the operational capabilities of Member States and assisting operational co-operation through the Cybersecurity DSI. In particular this work programme aims to reinforce investments among key stakeholders under Directive 2016/1148¹⁷.

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

¹³ http://ec.europa.eu/newsroom/document.cfm?doc_id=47559

¹⁴ <http://datalandscape.eu/study-reports/first-report-facts-and-figures-updating-european-data-market-monitoring-tool>

¹⁵ <https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy#usefullinks>

¹⁶ JOIN (2017) 450 final

¹⁷ Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union (OJ L 194, 19.7.2016, p. 1–30)

Furthermore, the WiFi4EU initiative, that started under the Work Programme 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 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.

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 investments¹⁸ 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.

¹⁸ Financial instruments for Broadband have been included in previous years' work programmes

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.

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 work programmes and can be used by any organisation, be it public or private^{19 20}.

In addition, the exploitation of HPC by the DSIs within CEF shares 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 society forward. The DSI's 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.

Communication

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

¹⁹ A full description of the available Building Block is available here
<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/CEF+Digital+Home>

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 efforts.

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 support²¹ 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 2019

The CEF Telecom Work Programme 2019 (WP2019) 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 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.

²¹ <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Media+library>

The Work Programmes at the beginning of the CEF programme could fund only a selection of DSIs based on their maturity. The last three Work Programmes (WP2018, 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. WP2019 also includes three new DSIs: Blockchain, Platform on disinformation and European Platform for Digital skills and Jobs..

2.3.2 **Work Programme content overview**

DSIs to be supported by WP2019 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 2019 have already been supported under previous Work Programmes. Some activities launched in 2014, 2015, 2016, 2017 and 2018 still need to be completed and are funded via budget committed in the respective years. The current document lists DSIs that will receive funds for additional or continuation of activities in 2019, as well as new actions:

- 1. Mature DSIs which have already been supported under previous Work Programmes and for which additional funding is foreseen under the Work Programme 2019:** Europeana, eIdentification, EU Student eCard, eSignature, eDelivery, eInvoicing, Public Open Data, Automated Translation, Cybersecurity, eProcurement, Business Registers Interconnection System (BRIS), eHealth, Electronic Exchange of Social Security Information (EESSI), EuropeaneJustice, eArchiving.
- 2. New DSIs:** Platform on disinformation, Blockchain and European Platform for Digital skills and Jobs.

As regards broadband infrastructure, the support for the Technical Assistance will continue and complete the activities started in 2016. 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 eighteen DSIs and related support activities for 2019 amounts to about EUR 90.9 million including the contribution from EFTA countries. The table below shows the indicative 2019 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 0.433 million. Funding for the WiFi4EU initiative amounts to EUR 53.5 million including the 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.

DSI	Core Service Platform - CSP (million EUR)	Generic Services - GS (million EUR)	Indicative duration (years)
<i>Well established DSIs</i>			
Europeana	0	2	1.5 (GS)
<i>DSIs already supported under previous WPs</i>			
eIdentification and eSignature	eID: 3 eSignature: 2	eID: 4.5 eSignature: 0.5	1.5 (CSP); 1.5(GS)
EU Student eCard	2.5	1	2 (CSP) 1(GS)
eDelivery	2.5	1	1 (CSP); 1.5 (GS)
eInvoicing	0.8	6.2	1 (CSP); 1 (GS)
Public Open Data	0.5	5	2-3(CSP); 3(GS)
Automated Translation	6	4	2 (CSP); 2(GS)
Cybersecurity	0	10	3(GS)
eProcurement	0	3	1.5 (GS)
eHealth	4	5	4(CSP); 2-4(GS)
BRIS	1	2	2 (CSP); 1.5 (GS)
EESSI	5	0	1(CSP)
European e-Justice	1.5	3	2(CSP); 2(GS)
eArchiving	3	0	1 (CSP)
<i>NEW actions</i>			
Platform on Disinformation	2.5	0	3 (CSP)
European Platform on Digital Skills and Jobs	1.5	1	3 (CSP and GS)
Blockchain	4	0	1 (CSP)

Total in million EUR	88²²	
WiFi4EU	Proposed allocation in million EUR	
** WiFi4EU vouchers	51	2
Programme Support Actions		
DSI Communication	0.3	
Studies and other support measures	2.1	
Maintenance and access to IT tools	0.1	
*Broadband Technical Assistance	0.333	
*Broadband Specific Support Actions	0.1	
** Other support actions to WiFi4EU	2.4	
** WiFi4EU Communication	0.1	
DSI projects evaluations and reviews	0.4	
Total	5.8	
Grand Total		
144.8		

Table 1 - At-a-glance overview of projects proposed for funding in 2019 including the split between core platforms and generic services

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”.

²² Of which EUR 14.308.654 from the 2020 budget, subject to the availability of the appropriations provided for in the general budget of the Union for 2020 following the adoption of that budget by the budget authority.

2.3.4 **Implementation mechanisms and types of financial support**

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 calls for applications (voucher scheme).

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 (albeit exception in art 10.4 of the CEF Regulation, under which the grant can cover up to 100 % of eligible costs);
- procurement to set up the Support Facility for Broadband Technical Assistance (partial financing);
- Procurement for all programme support measures;
- calls for applications awarding vouchers (grants) for the wireless internet access. The vouchers 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 will provide valuable experience to adapt these instruments if necessary.

More information on type of financial assistance and implementation is provided in Sections 3, 4 and 5. Detailed information will be provided in the call documentation for each action.

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. In that sense, integration works aimed at supporting the use of Building Blocks by the DSIs will be part of the activities granted in the calls.

3.1 Access to digital resources of European heritage – EUROPEANA

3.1.1 Background and rationale

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.

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.

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'). They 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.

On 6 September 2018, the Commission report on the evaluation of Europeana and the way forward was adopted (COM(2018) 612). The report outlines the strengths and challenges of Europeana and also lays out the Commission's future strategy for the initiative.

3.1.2 Implementation 2019

3.1.2.1 Baseline

Core Service Platform:

CEF funding supports the operation and upgrade of the Europeana Core Service Platform and 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 and expansion of the Europeana Network to promote capacity-building and cross-border collaboration between cultural institutions and professionals, as well as cultural and digital innovation. The Core Service Platform hosts all the projects funded under Generic Services. Support for the Core Service Platform provided in WP2017 will fund the Core Service Platform until June 2020.

Generic services:

Support 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) concrete examples of re-use of the material accessible through Europeana in other sectors, in particular research, education, creative industries or tourism. The WP 2018 covered activities aiming to improve the quality of the metadata and content accessible through Europeana.

3.1.2.2 New Actions in WP 2019

Core Service Platform

No additional funding is foreseen for the Core Service Platform in WP2019.

Generic Services

The Council Conclusions on the role of Europeana for the digital access, visibility and use of European cultural heritage call for continued support to Europeana Generic Services .

In addition, the outcome of the independent evaluation of the Europeana initiative calls for a higher engagement of Cultural Heritage Institutions not only on providing content but also on the development of curated exhibitions, and the development of smart content that is engaging for users. It is therefore proposed to provide support to cultural institutions and other public and private partners to continue to increase the amount of data accessible through Europeana. This data should be of high quality and suitable for reuse. It is furthermore proposed to help cultural institutions develop new ways to make accessible such content through the creation of curated collections, exhibitions or any other personalized ways of engaging users, as well as increase awareness and usage of Europeana.

3.1.2.3 Benefits and expected outcomes - including EU added value

The actions supported in 2019 under Generic Services will increase the amount of reusable high quality data accessible through Europeana, increase in personalised curated content (exhibitions and collections); broaden the awareness and usage of Europeana and improve the end-user experience.

3.1.2.4 Use of Building Blocks

Europeana will use the Automated Translation Building Block in its Core Service Platform to support the creation of exhibitions in several languages.

3.1.2.5 Governance, operations and stakeholders involvement

Europeana is the outcome of 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 that provide support in activities such as 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.

The Recommendation on the digitisation and online accessibility of cultural material and digital preservation 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). DCHE assists the Commission in monitoring the implementation of this DSI and provides guidance on Europeana's general objectives, governance and strategic priorities for CEF Work Programmes. 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.

3.1.2.6 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 budget:	EUR 2 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	1.5 years
Indicative call publication date:	Q1 2019

3.2 Electronic identification and authentication – EID AND ESIGNATURE

3.2.1 Background and rationale

Secure electronic transactions require certainty about the identities of the parties taking part in them, as well as the proper accreditation of their will. Electronic identification and authentication (eID) and electronic signatures (eSignatures) are therefore key enablers for secure electronic transactions, and thus for the realisation of a Digital Single Market. In the European Union, the provision of eID and eSignature services is based on the regulatory framework established by Regulation (EU) 910/2014 of the European Parliament and of the Council of 23 July 2014 ("the eIDAS Regulation").

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

3.2.2 Implementation 2019

3.2.2.1 Baseline

Core Service Platform:

For eID, the Work Programmes of 2014 to 2018 offered services to support Member States at both technical and operational level (e.g. eIDAS sample implementation, service administration and stakeholder engagement) in order to:

- make operational the "eIDAS nodes", the technical infrastructures required by the eIDAS interoperability framework
- link attributes, mandates and authorities data to the electronic identification data
- facilitate the onboarding of different policy domains

For eSignature, Work Programmes 2014-2018 supported activities to develop, maintain and update the software of the DSS (Digital Signature Services) open-source library, the TL-Manager (Trusted List Manager) and the Trusted List Browser. In addition, it helped and trained national bodies responsible for the operation of the trusted lists and providers of solutions implementing advanced electronic signature relying on DSS, and promoted the uptake of the eSignature DSI in the Member States.

Generic services:

For eID, Work Programmes 2014-2018 supported the implementation of the eIDAS nodes, tailored to the national eID infrastructures, within Member States. It also supported the integration the eID building block in existing e-services/systems/online platforms in different public sector entities and private sector areas (such as financial institutions or mobile communications). This allowed cross border transactions compliant with the eIDAS Regulation to be performed, with special focus on supporting student mobility and the enablement of attributes, mandates and authorities data associated to the eID.

For eSignature, the Work Programmes of 2014 to 2018 helped develop systems for Member States and the private sector relying on the eSignature DSI Building Block (DSS).

3.2.2.2 New Actions in WP 2019

Core Service Platform

The Core Service Platform of eID will continue to provide support to Member States at technical and operational level. Such assistance will comprise technical support and advice, including the maintenance of the reference implementation, as well as supporting a broader uptake of eID. In addition to the support provided in previous WPs, the assistance will be extended also to the operation of the eIDAS interoperability nodes after the entry into force of the eID mutual recognition in September 2018, as well as to addressing implementation questions derived from this mutual recognition (such as identity matching issues). The support to the onboarding of new domains will be continued, with a special focus on the re-use of eID in mobile environments.

The Core Service Platform of eSignature in the WP2019 will continue to be focused on activities maintaining and updating DSS, TL-Manager and Trusted List Browser, providing help and training to national supervisory bodies and national Trusted List Scheme Operators. It will also continue supporting providers of solutions that implement advanced electronic signatures to rely on the DSS library for the creation and validation of e-signatures in compliance with the eIDAS Regulation. In addition to the previous work programmes, a set of test cases will be developed for implementers and assessment bodies to test the conformity of validation services to the eIDAS Regulation. Also, the Core Service Platform activities will have an increased focus on promoting the uptake of the use of the eSignature building block among Generic Services to both public and private entities established in the EU and EEA countries participating in the CEF Telecom programme.

Generic Services

For eID, the Generic Services under WP2019 will continue to offer support for the integration of the eID in existing electronic and mobile services/systems/online platforms in different public or private sectors, as well as for the provisioning of additional enabling trustworthy attributes, mandates and authorities being associated with the cross-border use electronic identities through the eIDAS node. Actions supported are aimed to enhance the services provided to the citizen in different sectors, such as financial, transport, shared economy or mobile communications, as well as to sustain EU policies where trusted identification or verification of attributes is needed (e.g. tackling disinformation, proof of age for the protection of minors). The purpose is to consolidate the eIDAS-based ecosystem to the benefit of all citizens and sectors across the EU and EEA countries.

For eSignature, the Generic Services under the WP 2019 will continue to support the development, relying on the DSS open-source library (either by incorporating the library's code or as a reference implementation), of systems creating or validating electronic signatures and electronic seals in line with the eIDAS Regulation, to be used by Member States and the private sector.

3.2.2.3 Benefits and expected outcomes - including EU added value

eID:

On one hand, the Core Service Platform of eID offers Member States support to build and operate their eIDAS interoperability nodes. This support will be key in 2019, since, under the eIDAS regulation, Member States were obliged to recognise the notified eID schemes from the other Member States by 29 September 2018. The eID Generic Services, on the other hand, support public and private bodies providing online services to integrate those services with the eIDAS interoperability nodes. This will enable them to accept foreign eIDs, and when applicable, attributes, mandates and authorities information associated to the eID, from the trustworthy and secure identification and authentication environment set up by the eIDAS regulation. Thanks to the combination of both forms of support, EU citizens will be free to rely on the eID that they already use at national level to securely access digital services provided in other Member states, thus realising the Digital Single Market.

eSignature :

The Core Service Platform of eSignature provides services and tools aimed to support the operation of the Trusted Lists that Member States are obliged to establish, maintain and publish in line with eIDAS Regulation. In addition, such services and tools facilitate the creation and validation of electronic signatures and seals according to eIDAS Regulation. The Generic Services support the actual use of those tools in electronic signature systems. Thanks to such support, awareness and uptake of electronic signatures will increase, in particular qualified electronic signatures, thus increasing interoperability and mutual recognition of electronic signatures across the EU.

3.2.2.4 Use of Building Blocks

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

3.2.2.5 Governance, operations and stakeholders involvement

The European Commission is in charge of the set-up, operation and maintenance of the Core Service Platform. 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.

3.2.2.6 Type of financial support

Title:	eID and eSignature - Core Service Platform
Indicative budget:	eID: EUR 3 million

Type of financial support:	eSignature: EUR 2 million Procurement - Framework contract(s) (indicative number of contracts: 10 to 15 specific contracts)
Indicative duration of the action:	1.5 years

For Generic Services, proposals may be submitted by consortia composed of a minimum of three organisations (out of which at least one should be a public service or acting on behalf of a public service) based in one or more Member States and/or EEA countries participating in the CEF Telecom programme.

Title:	eID and eSignature - Generic Services
Indicative budget:	eID: EUR 4.5 million eSignature: EUR 0.5 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	1.5 years
Indicative call publication date:	Q1 2019

3.3 EU STUDENT ECARD

3.3.1 Background and rationale

The objective of the EU Student eCard DSI is to facilitate, simplify and improve the quality of mobility of students across Europe. The DSI is grounded on the European Parliament's Resolution of 12 April 2016 which called on the Commission to create a "European Student e-Card" to support the mobility of students offering access to campus services. The Digital Education Action Plan²³ sets out the vision that "by 2025 all students in Erasmus+ mobility should be able to have their national identity and student status recognised automatically across EU Member States, including access to campus services when arriving abroad."

Since 1987 when the Erasmus programme was launched, 9 million persons have benefited from cross-border exchanges. Alone in year 2016, the programme enabled 725,000 Europeans to study, train, or work in another European country. Despite the general increase in cross-border mobility of students and online services,²⁴ cross-border student mobility still faces a number of hurdles: in Europe there are currently about 2.000 different student information systems, with a low degree of interoperability. Students typically have to register in person in the host university and go physically to the office to get access to campus services. The exchange of the related academic documents involves mainly paper-based processes²⁵.

The EU Student eCard DSI will offer **students** new user-friendly ways to access academic and non-academic services and allow Higher Education Institutions (HEIs) to exchange student data in a trusted manner. The aim of the EU Student eCard DSI is thus to enable the automatic recognition everywhere in Europe of the student status and identity based on the Once-Only Principle²⁶, across the EU, and to give easy online access to the academic and other e-services while ensuring seamless electronic exchange of academic documents. The take up of such services will also allow HEIs to achieve noteworthy simplification of several administrative procedures for the involved administrative staff.

3.3.2 Implementation 2019

3.3.2.1 Baseline

Current solutions used by higher education institutions generally do not provide trustworthy and secure enough identification and authentication environments. Often student mobility is based either on low trust login credentials or the use of a physical card.

Under Work programmes 2017 and 2018, the uptake of eIDAS-enabled eID by Higher Education Institutions (HEI) for cross-border student' authentication was supported within the eID DSI. However, in view of achieving the political objectives of The Digital Education

²³ COM(2018) 22 final

²⁴ https://www.capgemini.com/wp-content/uploads/2017/11/2017-egovernment-benchmark_background_v7.pdf

²⁵ <https://publications.europa.eu/en/publication-detail/-/publication/c0bc89a9-437b-11e8-a9f4-01aa75ed71a1/language-en/format-PDF/source-69424735>

²⁶ For details on Once Only Principle, please follow the <https://ec.europa.eu/digital-single-market/en/news/eu-wide-digital-once-only-principle-citizens-and-businesses-policy-options-and-their-impacts/>

Action Plan²⁷, a fully functional European Student eCard system requires a more centralised approach to scale up the uptake of such services. The EU Student eCard DSI aims at offering online identification and authentication to students and secure solutions for the exchange of relevant data needed by online services.

3.3.2.2 New Actions in WP 2019

Core Service Platform

The Core Services should integrate solutions developed for the Erasmus+ infrastructure by the projects Erasmus Without Papers, the European Student Card and EMREX into the eIDAS framework. In addition, the Core Services should also gradually integrate schemes that are close to the Erasmus+ programme, such as the "Digital Opportunity Traineeships". The Core Services should offer common approaches and technical solutions to HEIs to allow them to benefit from the DSI. In addition it will cover outreach and collaboration activities.

The platform should offer comprehensive, interoperable yet flexible solutions needed for a highly heterogenous academic environment:

Technical activities:

- Define and implement the necessary IT architecture and functionalities for a i) pan-European online student identification and authentication system and ii) relevant student data exchange based on the analysis of the specific requirements of student mobility and of HEIs online services;
- Provide a set of free and open source solutions for student (eIDAS-enabled) identification and authentication and for exchange of academic data based on common academic attributes
- Providing a portal with all needed, free-of-charge information, guidelines, downloadable softwares, etc.
- Stakeholder engagement and monitoring activities:
 - Spreading awareness about the EU Student eCard DSI for current and prospective users, both in the public and in the private sectors, including national authorities and administrations.
 - Informing, training and advising stakeholders in and beyond the current EU Student eCard community.
 - Engaging with user groups.
- Service administration
 - Day-to-day administration, maintenance and operation of the DSI.
 - Testing services for HEIs
 - Helpdesk activities

Generic Services

²⁷ COM(2018) 22 final

WP 2017 and 2018 funded the integration of the eID DSI in existing e-service/system/online platforms of HEIs to facilitate the mobility of students in Europe²⁸.

WP 2019 will continue to support student mobility through the development of solutions, based on the reuse of the eIDAS eID and of other CEF Building Blocks, for online access to e-services for students provided by the host HEIs and other entities, and for the electronic transfer of student information among the involved parties (students, sending HEI and hosting HEI). Proposals shall link and integrate to the extent possible the work of the Erasmus+ projects, such as the European Student Card, Erasmus Without Paper and EMREX. The aim is also to broaden the use of the eIDAS eID to universities that do not use them yet and have a high number of ERASMUS+ students incoming and/or outgoing

3.3.2.3 Benefits and expected outcomes - including EU added value

The EU Student eCard will allow ubiquitous automatic recognition of the student status and identity, electronic exchange of academic data, as well as access to universities' online services, with a high degree of security. Students will be able to electronically apply to any higher education institution in Europe without having to go physically to an office and go through all the administrative paperwork.

3.3.2.4 Use of Building Blocks

The EU Student eCard DSI re-uses the eID building block. Possible use of the eSignature, the eDelivery and the Automated Translation building blocks will be analysed and evaluated by the end of 2020.

3.3.2.5 Governance, operations and stakeholders involvement

The governance group will initially consist of the representatives of the Ministries of Education, of the higher education institutions and of eIDAS experts, together with the relevant Commission services.

3.3.2.6 Type of financial support

The core service platform and the engagement activities will be implemented through grant, with 100% funding of the eligible costs. For Core Services, proposals may be submitted by consortia composed of a minimum of three organisations, based in three or more Member States and/or EEA countries participating in the CEF Telecom programme.

Title:	EU Student eCard - Core Service Platform
Indicative budget	EUR 2,5 million
Type of financial support:	Grants- Open call for proposals
Funding rate:	Up to 100 % of eligible costs
Indicative duration of the action:	Up to 2 years

²⁸ Links to the funded projects: <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/2015-el-ia-0083>;
<http://www.esmo-project.eu/>; <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/2017-eu-ia-0051>;
<https://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/2017-de-ia-0022>

Indicative call publication date:	Q3 2019
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The generic services will be financed through grants.

For Generic Services, proposals may be submitted by consortia composed of a minimum of three organisations (out of which at least one should be a public sector body or acting on behalf of a public sector body), based in three or more Member States and/or EEA countries participating in the CEF Telecom programme. The consortium should comprise a European academic association/network.

Title:	EU Student eCard – Generic Services
Indicative budget	EUR 1 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	Up to 14 months
Indicative call publication date:	Q1 2019

3.4 Electronic delivery of documents – eDELIVERY

3.4.1 Background and rationale

Many administrative procedures and business processes rely on the exchange of data and documents between different parties. When these procedures and processes are meant to turn into digital, the need for a secure, trusted and reliable electronic exchange becomes apparent.

The Electronic Registered Delivery Services (ERDS) defined in the eIDAS Regulation addresses that need. Since 1 July 2016, the provisions set by the eIDAS Regulation for ERDS are binding 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. ERDS also provides evidence relating to the handling of the transmitted data, including the proof of sending and receiving the data, and that protects it against the risk of loss, theft, damage or any unauthorised alterations. The eDelivery Building Block is aligned with eIDAS ERDS.

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 allow people and business trade, innovate and interact legally, safely, securely, and at an affordable cost, making their lives easier.

3.4.2 Implementation 2019

3.4.2.1 Baseline

As regards the Core Service Platform, Work Programmes 2014 – 2018 supported the creation and evolution of the Core Service Platform of the eDelivery DSI, which 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 onboarding of pan-European projects and new software vendors.

Generic Services, throughout Work Programmes 2015-2018, 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 New Actions in WP 2019

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

WP2019 will continue to support the deployment and operation of Access Points and Service Metadata Publishers, as well as the upgrading of data exchange solutions 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.

3.4.2.3 Benefits and expected outcomes - including EU added value

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. In Q4 2017 the following eDelivery Access Points are deployed in Production/ Final Acceptance environments:

- BRIS: 24
- EESSI: 5
- EU-CEG: 13
- Me-CODEX: 5
- Noble: 4
- OpenPEPPOL: 215
- ODR, Automated Translation and several other projects are deploying eDelivery Access Points.

3.4.2.4 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 eId and eSignature Building Blocks in a sector specific context.

3.4.2.5 Governance, operations and stakeholders involvement

The European Commission is in charge of the set-up, operation and maintenance of the Core Service Platform. Member States play an active role in the implementation and deployment process, in particular to facilitate and accelerate widespread acceptance and use. Governance and operational management arrangements are in place and consist of representatives of the Member States (eDelivery Informal Cooperation Network) and the Commission (Operational Management Board). Cooperation with selected representatives from selected business sectors of services is also foreseen, by means of an extended DSI technical sub-group 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), whose aim is to discuss technical issues relating to the operation of Core Service Platforms for eDelivery services.

3.4.2.6 *Type of financial support*

Title:	eDelivery - Core Service Platform
Indicative budget	EUR 2.5 million
Type of financial support:	Procurement - Framework contract(s) (indicative number of contracts: 15 to 20 specific contracts)
Indicative duration of the action:	1 year

For Generic Services, proposals may be submitted by consortia composed of a minimum of two entities, public and/or private, based in one or more Member States and/or EEA countries participating in the CEF Telecom programme.

Title:	eDelivery – Generic Services
Indicative budget	EUR 1 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	1.5 years
Indicative call publication date:	Q1 2019

3.5 Electronic invoicing – eINVOICING

3.5.1 Background and rationale

Directive 2014/55/EU of the European Parliament and of the Council ²⁹ (the eInvoicing Directive) was adopted in April 2014. It mandates all public buyers to receive and process eInvoices complying with the European standard following a gradual transition after the adoption of the European standard. The European Standard which was defined by CEN was published by the European Commission on 17 October 2017.

The use of the CEF eInvoice DSI to foster interoperable eInvoice solutions is crucial. As well through this DSI the eDelivery AS4 network is currently spread all over Europe.

3.5.2 Implementation 2019

3.5.2.1 Baseline

The following activities have been ensured for the Core Service Platform in previous Work Programmes:

- standardisation activities performed by the European Committee for Standardisation (CEN), in particular the standardisation of the semantic data model;
- Conformance testing, for implementers to ensure the correct implementation of the syntaxes. To this purpose, a test infrastructure and services around it are offered to check the conformity of solutions/services;
- End January 2017 the services associated with eInvoicing Readiness Checker³⁰ were made available;
- Interaction with the stakeholder community, in the form of various stakeholder engagement activities and a 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.
- Creation of registers for CIUS³¹/Extension specifications.

²⁹ 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).

³⁰ Support to 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

³¹ Core Invoice Usage Specifications. They are use “guidelines” for the technical implementation of the European Standard for eInvoicing (EN).

For Generic Services, in 2015-2017, €23 million were awarded. The 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. In 2018 generic services put emphasis on supporting countries lagging behind in terms of eInvoicing maturity on one hand and also financing projects to support more advanced eInvoicing/eProcurement solutions with the aim of achieving the end-to-end eProcurement, on the other hand.

3.5.2.2 New Actions in WP 2019

Core Service Platform

The funding will enable the continuity of the provision of the services of the eInvoicing Core Service Platform. Such services cover conformance testing, eInvoicing readiness checker, implementation workshops and training, 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) available here:

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

Generic Services

With the publication of the European Standard (EN) in the Official Journal of the EU on 17 October 2017,³² Member States enter into the implementation phase and therefore have the obligation to receive and process electronic invoices - even in countries where the uptake of e-Invoicing is less developed.

As in the 2018 call, the generic services should allow a reinforced support to Member States lagging behind in terms of uptake of eInvoicing (and late comers in terms of the compliance with the eInvoicing Directive) and support innovative projects that allow end-to-end eProcurement to be achieved through the integration of Invoicing modules.

3.5.2.3 Benefits and expected outcomes - including EU added value

The financed actions will increase the uptake and use of the CEF eInvoicing DSI by supporting public authorities, especially regional and local authorities, in meeting the requirements of the eInvoicing Directive, as well as uptake by the market, mainly in the countries lagging behind. The support provided through CEF will also promote innovative solutions, integrating eInvoicing in the e-procurement chain or favouring real time eInvoicing/reporting/payment.

³² See http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.266.01.0019.01.ENG&toc=OJ.L:2017:266:TOC

3.5.2.4 Use of Building Blocks

The e-Invoicing DSI is a stand-alone Building Block, which is used by other DSIs. 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.

3.5.2.5 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. The European Commission is in charge of the operational management of the service. The European Multi-stakeholder Forum on eInvoicing (EMSFel) is the advisory body to the Commission for this CEF DSI. Its mandate was renewed in June 2017 for 3 years.

3.5.2.6 Type of financial support

Title:	eInvoicing - Core Service Platform
Indicative budget:	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:	1 year

For Generic Services, proposals may be submitted by consortia composed of a minimum of two entities (public and/or private), based in one or more Member States and/or EEA countries participating in the CEF Telecom programme.

Priority will be given to projects coming from national entities to achieve a higher impact especially the ones who are lagging behind. Another criterion will be on innovative projects that will result in a better processing of invoices, combining orders and payments.

Title:	eInvoicing – Generic Services
Indicative budget	EUR 6.2 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	1 year
Indicative call publication date:	Q1 2019

3.6 Access to re-usable public sector information – PUBLIC OPEN DATA

3.6.1 Background and rationale

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. The underexploited potential of cross-border and cross-sectorial synergies can only be achieved through the deployment of infrastructure at EU level.

The Communication "Towards a common European data space"³³ of 25 April 2018 argues that access to and re-use of public and publicly funded data constitute major cornerstones of a common European data space. Hence, the Commission undertook to continue its support for the deployment of a fully-fledged open data infrastructure including the European Data Portal³⁴. This infrastructure should address the outstanding technical and legal challenges and make available interoperable data and tools, as well as knowledge and support, in order to maximise the re-use of open data by public administrations and businesses.

The European infrastructure also implements the goals of the PSI Directive³⁵. The proposal for a recast of the PSI Directive of 25 April 2018³⁶ aims at increasing the availability of data by bringing new types of public and publicly funded data into the scope of the Directive and encouraging the publication of dynamic data and the uptake of application programming interfaces (APIs).

3.6.2 Implementation 2019

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 almost 900.000 datasets contained in 78 catalogues from 34 countries. It is also harvesting the metadata of European Union Institutions and bodies disseminated via the EU Open Data Portal (<http://data.europa.eu/euodp>), as well as EUMETSAT and ESA data collections. It is available in all 24 EU languages and text metadata are translated from/to all of them, making use of the Automated Translation Building Block. Activities supporting data production and data take-up have also taken place (e.g. training material and guidelines for data producers, studies on Creating Value through Open Data and on Open Data Maturity in Europe). The software code of the portal and all its modules has been made freely available as Open Source Software.

The platform activities for the period 2018-2020 are continued through a second service contract launched and attributed with the support of the CEF Workprogramme 2017. The

³³ [COM\(2018\) 232 final](#).

³⁴ <http://data.europa.eu/europeandataportal>.

³⁵ [Directive 2003/98/EC on the re-use of public sector information](#)

³⁶ [COM/2018/234 final](#)

platform is hosted since February 2018 on the Commission's DG DIGIT cloud, guaranteeing its stability and independence from periodical service contracts.

In addition to the functions currently provided by the European Data Portal, implementing actions adopted with the 2018 workprogramme are being developed starting from 2018: (i) a cloud-based big data test infrastructure for the sharing and analysis of 'big data'; (ii) the FIWARE Context Broker for enabling the European Data Portal and the Member States to collect and re-use real-time data; (iii) a Support Centre for data sharing, to support the knowledge exchange between all actors in the data economy, through the provision of advice, best practices and methodologies for data sharing and analytics. The first two functionalities will constitute two new building blocks, available also as independent modules to be reused by other DSIs and Member States.

As regards the generic services, the first two call for proposals in WP2015 and 2016 covered the harmonisation of cross-border/cross-sector metadata and/or data by participating cities, national regulatory authorities, NGOs and private actors. Seven actions addressing different sectors (including the environment and geospatial information) are currently ongoing.

Following the third call launched in 2017, actions in 2018 addressed 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.

A fourth call has been launched in 2018 addressing three themes: 1) support for the re-use of information made discoverable/available through the European Data Portal; 2) generation of cross-border services providing access (view and download) to harmonised thematic open dataset(s) and the corresponding metadata; 3) creation of new access services to increase the HPC and data capacities of the European Data Infrastructure.

3.6.2.2 New Actions in WP 2019

Core Service Platform

Continuation of the hosting of the European Data Portal on DIGIT cloud.

Generic Services

Proposals will address the generation of cross-border and/or cross-domain services re-using information made discoverable/available through the European Data Portal, where applicable in combination with other sources of information. Actions will have to support the deployment of new innovative services, in particular integrating/developing ecosystems supported by open platforms, making use of static and/or real time data accessed or made accessible via appropriate existing or newly developed APIs (including the CEF Context Broker Building Block). Harmonisation should address the data content, the level of detail where applicable (e.g. equivalent granularity in case of geospatial data), data structure, semantic. Actions may include addressing issues related to the support to the deployment of mature open data infrastructures within Member States, facilitating the harmonisation/interoperability across different domains and/or different government levels. Both technical and legal issues will have to be taken into account, therefore including the adoption of harmonised conditions for re-use (be it through direct access or through a provided service).

Actions will have to address as a priority high value datasets³⁷ the re-use of which maximises the economic impact of the proposed solutions and generates direct and indirect important socio-economic benefits. Other categories may be considered, if duly justified. The facilitation of data re-use, both at the level of source data that at the level of data dissemination, should as much as possible make use of existing or newly developed APIs.

Actions will also have to assess the effects of their implemented solutions, and collect examples of re-use, in order to evaluate the foreseen benefits for citizens and/or businesses.

3.6.2.3 Benefits and expected outcomes - including EU added value

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 also 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.

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. This DSI also provides users with the means to make use of the high computing power, and create solutions that benefit the economy and society.

3.6.2.4 Use of Building Blocks

The translation makes use of the automated translation building block wherever possible, in particular for the translation of the text metadata. The current version of the core service platform of the European Data Portal will progressively integrate new 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 and access Member State resources for which identification is required will make use of the eID building block, whenever possible.

3.6.2.5 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. 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

³⁷ High value datasets have been individuated as belonging to the domains defined in Commission notice 2014/C 240/01 "Guidelines on recommended standard licences, datasets and charging for the reuse of documents" (i.e. in the domains of geospatial data, earth observation and environment, transport, statistics, companies).

programme could be integrated over time. New stakeholders such as the FIWARE foundation may also be included.

3.6.2.6 *Type of financial support*

Title:	Access to re-usable public sector information – Public Open Data - Core Service Platform
Indicative budget:	EUR 0.5 million
Type of financial support:	Procurement - framework contract, 1 specific contract
Indicative duration of the action:	2 to 3 years

For Generic Services, proposals may be submitted by consortia composed of a minimum of two entities (where at least one is a public sector body), based in one or more Member States and/or EEA countries participating in the CEF Telecom programme.

Title:	Access to re-usable public sector information – Public Open Data – Generic Services
Indicative budget	EUR 5 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	Up to 3 years
Indicative call publication date:	Q3 2019

3.7 AUTOMATED TRANSLATION

3.7.1 Background and rationale

Multilingualism is a powerful symbol of the EU's aspiration to be united in diversity. 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 official EU languages. At the same time, multilingualism is one of the most substantial challenges for the creation of a truly integrated EU. The innovative deployment of Natural Language Processing tools (NLP) such as machine translation or cross-lingual search can help preserve multilingualism and address linguistic barriers in the digital world.

The purpose of the Automated Translation Building Block DSI (CEF AT) is to lower language barriers in the Digital Single Market by providing multilingual support to other DSIs, pan-European digital public services and public administrations, so that citizens as well as businesses in all EU Member States and EEA countries participating in the CEF Telecom Programme can benefit from services in their own language.

3.7.2 Implementation 2019

3.7.2.1 Baseline

The core service platform (CSP) of the CEF AT currently offers automatic text translation based on the eTranslation service³⁸ and provides an EU-wide coordination and networking mechanism for collecting and sharing language resources, the European Language Resource Coordination (ELRC-SHARE³⁹). It is open to public administrations in Member States plus Iceland and Norway.

The current automatic text translation service (eTranslation) has been operational since November 2017, gradually replacing its predecessor MT@EC. Its neural machine translation engines are trained on legal texts in the EU domain and offer machine translation to and from all EU official languages, Icelandic and Norwegian (Bokmål). The service is available via a web interface⁴⁰ and an API⁴¹, allowing easy integration into online services.

At present 36 different information systems connect to eTranslation: this figure is expected to rise to 50 (40% increase) by the end of 2019.

The ELRC-SHARE repository contains language resources collected in all Member States, Iceland and Norway. More language resources are continuously being added, and in future

³⁸ <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Machine+Translation>

³⁹ <https://elrc-share.eu/>

⁴⁰ <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Use+CEF+eTranslation+as+a+stand-alone+service>

⁴¹ <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Integrate+eTranslation+with+your+online+services>

natural language processing (NLP) tools will also be included to expand the services offered by CEF AT. The tools will be used to train automated translation systems or in other natural language processing (NLP) solutions.

Work on an automated adaptation facility is underway. It will allow the automated production and configuration of text translation engines tailored to the needs of online public services in specific domains and will be close to completion by the time the 2019 WP actions start. By that time, eTranslation will also offer a first version of quality metrics for assessing translation quality.

Currently, five CEF DSIs (European Data Portal, Open Dispute Resolution, European e-Justice, Electronic Exchange of Social Security Information (EESSI) and e-Procurement) are connected to the CEF Automated Translation core service platform.

To date, CEF AT collaborative projects (generic services) have supported the integration of the machine translation service into public online services and the collection of language resources through ELRC-SHARE to improve the quality of the machine translation services offered by CEF AT.

3.7.2.2 New Actions in WP 2019

Core Service Platform

In 2019, the objective is to continue support for the operation, maintenance and upgrading of the Automated Translation core service platform and the wider deployment of its services. The main priority will be to step up the roll-out to public administrations throughout EU Member States and CEF associated countries.

Additional objectives include:

- maintaining, configuring, adapting and integrating the automated translation services into CEF DSIs and other digital public services;
- expanding the scope of services offered by the CSP, by introducing new NLP tools and services (e.g. multilingual named entity recognition or automated text classification).
- operating the automated adaptation facility and offering state-of-the-art services by incorporating technological improvements, such as automatized data curation or providing user access to text flagging for forced translation;
- coordinating the collection and processing of language resources, and maintaining the language resource repository;
- user support for the services and tools provided by CEF AT;
- supporting stakeholder management and outreach activities to ensure that relevant content is available through the CEF Digital Single web portal.

Procurement will be used to purchase or deploy NLP tools and/or services and to secure hosting capacity (e.g. cloud services) appropriate for the needs of the CSP.

Based on the estimated eTranslation service usage in 2018, the service is expected to handle around 8 million requests (40 million pages) and to be connected to around 50 information systems in 2019.

Generic Services

In 2019, the main objectives are to support the collection of language tools and resources for specific domains and for under-resourced languages as well as to stimulate the integration and take-up of CEF AT services.

To this end, **three types of collaborative projects** will complement the generic services projects supported under previous work programmes:

- **Collaborative language resource projects** to facilitate the provision of language resources to CEF AT through ELRC-SHARE. Projects will need to identify, collect and process (e.g. anonymization, aggregation, alignment, conversion, IPR clearance) language resources in the Member States and CEF associated countries or link national language resources or data infrastructures to the ELRC-SHARE repository. The collected resources should be freely and openly available by and beyond the end of the project duration in order to enable sharing of language resources. Priority will be given to:
 - corpora of EU official languages, Icelandic and Norwegian, ready to be made available as free and open resources;
 - resources in the domains relevant for CEF DSIs or domain-specific multilingual corpora in areas of public interest (e.g. scientific research, health, tax and customs, financial or cultural heritage domains) and
 - multilingual parallel language resources for language pairs enabling quality improvements in automated translation services for official languages of the Member States, Iceland and Norway.
- **Collaborative language tools projects** to make existing language specific tools freely and openly available through the ELRC-SHARE repository. Projects should address any issues necessary for submitting the tools to the ELRC-SHARE repository (e.g. identification, documentation, conversion, standardisation, normalisation, IPR clearance), thus enabling reuse in other digital public services. Priority will be given to language-specific tools with strong multilingual interoperability aspects and specifically covering under-resourced official languages in the EU Member States, Iceland and Norway.
- **Integration projects** to integrate and/or complement the latest functionalities of the CEF AT CSP into CEF DSIs and/or national digital public services. The integration processes are expected to result in fully functional services within the duration of the project and put in place arrangements for sustainability beyond the project duration and the CEF programme.

Priority will be given to proposals demonstrating clear European added value and societal impact. Where appropriate, use of the eDelivery Building Block DSI is encouraged in collaborative projects.

3.7.2.3 Benefits and expected outcomes - including EU added value

The expected benefits are four-fold: i) helping achieve the Digital Single Market by lowering language barriers; ii) rolling out interoperable pan-European public online services; iii) boosting the quality, response capacity and efficiency of public sector translation services, and iv) ensuring secure connections.

The automated adaptation facility and the collected language resources will improve the quality of the translation for the targeted CEF DSI domains. The Translation service will be integrated into a growing number of CEF DSIs services. The collaborative projects will continue to strengthen the involvement of Member States, Iceland and Norway in the identification, collection, processing and sharing of language resources. They will also result in the integration of automated translation technology into existing public online services.

3.7.2.4 Use of Building Blocks

CEF Automated Translation is a Building Block DSI. Its purpose is to provide multilingual support to CEF DSIs and other pan-European public online services.

The eTranslation service uses EU-Login for user authentication and therefore indirectly integrates the e-ID Building Block. The eDelivery building block is used for the secure handling and transmission of confidential content to and from the eTranslation service and the secure transmission of language resources. Its use will be encouraged for generic services, where appropriate.

3.7.2.5 Governance, operations and stakeholders involvement

The European Commission is in charge of the operation and maintenance of the Core Service Platform. Governance is provided through the Operational Management Board and the Architecture Management Board. Governance is also ensured by the CEF Telecoms Expert Group and the CEF Telecoms Committee.

Member States and other stakeholders are involved in data collection through the Language Resource Board, the governance body of the ELRC initiative. It gathers one technological representative and one public administration representative of each EU Member State and CEF associated country.

In the course of 2019, the network of stakeholders and contributors of language resources will be extended to involve relevant stakeholders beyond the public sector, such as commercial providers, non-profit organisations and professional organisations in the areas relevant to the DSIs, as well as users of the eTranslation service.

3.7.2.6 Type of financial support

The core service platform will be implemented through procurement contracts.

Title:	Automated Translation - Core Service Platform
Indicative budget:	EUR 6 million

Type of financial support:	Procurement - Framework contract(s) (indicative number of contracts: 2 to 3)
Indicative duration of the action:	2 years

For Generic Services, proposals may be submitted by consortia composed of a minimum of two public or private entities, based in two or more Member States and/or EEA countries participating in the CEF Telecom programme. Proposals shall address at least two different languages spoken in the Member States and/or EEA countries participating in the CEF Telecom programme. eDelivery deployment can be part of the proposal.

Title:	Automated Translation - Generic Services
Indicative budget	EUR 4 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	2 years
Indicative call publication date:	Q1 2019

3.8 Critical digital infrastructures support – CYBERSECURITY

3.8.1 Background and rationale

The Cybersecurity DSI provides the enabling infrastructure and support arrangements so that capabilities for operational co-operation exist in the Member States and that secure information exchange can take place.

The cybersecurity measures announced in the 2017 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. Directive 2016/1148 (the "NIS Directive") is now law in the Member States. It requires them to have a minimum baseline set of capabilities, it provides for cross-border co-ordination and co-operation and for regulation of those who deliver essential and digital services.

Consequently the DSI provides supports for Computer Security Incident Response Teams, operators of essential services (OES), digital service providers (DSPs), single points of contact (SPOC) and national competent authorities (NCAs). This includes Generic Services with the role of Core Service Platform co-operation mechanisms enabling data exchange and cross-border collaboration between the Member States. Three distinct CSP co-operation mechanisms are being developed, namely:

1. between CSIRTs to underpin the CSIRTs Network under the NIS Directive;
2. a European level Information Sharing and Analysis Centre (ISAC) facilities manager for improved preparedness and situational awareness, and finally;
3. a reporting and data exchange platform for notifications under the NIS Directive.

In tandem with developments on the proposed Cybersecurity Act, there will be supports for repositories, tools for awareness raising and assistance for security certification of digital products and services.

3.8.2 Implementation 2019

3.8.2.1 Baseline

The actions for the Core Service Platform 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 now known as the MeliCERTes facility is being implemented. Furthermore under the actions of WP 2018, co-operation mechanisms for facilitating information sharing and analysis centres and for statutory reporting are at the early stages of development.

The actions for Generic Services 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, known as the MeliCERTes facility established within WP 2015. Furthermore the actions

under the WP 2018 envisage the development of capabilities for not just CSIRTs, but also other cybersecurity stakeholders such as operators of essential services, digital service providers and national competent authorities under the NIS Directive.

3.8.2.2 New Actions in WP 2019

Core Service Platform

No new actions are envisaged for the Core Service Platform in 2019.

Generic Services

The actions under the WP 2019 will continue to support the enhancement of cybersecurity capabilities of the EU. They will address key players such as national competent authorities, single points of contact, operators of essential services, digital service providers, industry involvement in sectoral ISACs (at European and national levels). There will also be support for CSIRTs. The key focus will be in supporting the various stakeholders under the NIS Directive. 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 infrastructure and soft supports such as skills development, to facilitate the further improvement of cyber security operational capabilities in the Member States. The key emphasis is in improving operational cyber security capabilities for all relevant actors under the NIS Directive. Examples can include the acquisition and operation of national level IT systems, experimental test-beds including infrastructure for cyber ranges, training facilities, cyber security defences and reporting tools and processes, auditing facilities, skills and processes, training courses and cybersecurity exercises. 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.

Operators of essential services in both the public and private sectors who invest in improved cybersecurity infrastructure and in soft supports will be prioritised for assistance in this work programme.

3.8.2.3 Benefits and expected outcomes - including EU added value

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.

The DSI will likely result in improved compliance with the NIS Directive, higher levels of situational awareness and crisis response in Member States. 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.

3.8.2.4 Use of Building Blocks

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

3.8.2.5 Governance, operations and stakeholders involvement

A Governance Board was established as part of the WP 2014 preparatory action to focus on the DSI initiatives involving CSIRTs. Additional governance arrangements will be devised to meet the needs of the other stakeholders under this DSI, notably OES, DSPs, SPOCs, NCAs, CCAM entities, those involved in certification and other public bodies.

The roles of the strategic and policy level NIS Co-operation Group and of the operational level CSIRTs Network will be examined to ascertain what added value these formal structures under the NIS Directive could provide as regards governance.

3.8.2.6 Type of financial support

Title:	Cybersecurity DSI - Generic Services
Indicative budget	EUR 10 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	3 years
Indicative call publication date:	Q3 2019

3.9 Digital Public procurement – ePROCUREMENT

3.9.1 Background and rationale

The new Public Procurement Directives⁴² adopted on 28 March 2014 require Member States to implement electronic procurement for the phases eNotification, eAccess and eSubmission by October 2018. eCertis, a mapping tool for evidence and criteria, must be kept up-to-date by Member States. the European Single Procurement Document (ESPD) has to be used as self-declaration for all procurement procedures above the EU thresholds; the ESPD has to be provided electronically under the Directives. The successful implementation of this eProcurement DSI is essential to foster a single market for public procurement.

The CEF eProcurement DSI is crucial to enable interoperability across the Single Market. Around 90% of the ESPD services are funded through this program. In a number of Member States this was used to connect their ESPD services to integrate it with other services like national databases allowing buyers to retrieve information about exclusion or selection criteria directly without asking suppliers to send them (once-only principle – OOP). eCertis is essential for cross-border bidding.

3.9.2 Implementation 2019

3.9.2.1 Baseline

The Core Service Platform provides support in the form of compliance testing for implementers to ensure that eTendering solutions/services are interoperable. To this purpose, 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.

The first activity supported under Generic Services was the implementation of eCertis in 2015. In 2016 a second activity was added, by encouraging the uptake of ESPD. In 2017, the eTendering interface was added and in 2018 the implementation of contract registers. The funding was still available for the previous activities. By end of 2018 CEF eProcurement will have helped to create or make existing services (more than 30 services) interoperable all over Europe.

3.9.2.2 New Actions in WP 2019

Core Service Platform

Only Generic Services will be supported in 2019.

Generic Services

⁴² <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

Support will be continued for the activities started in previous years, namely eCertis, ESPD, eTendering and contract register. Three additional items will be added for 2019: the notice publisher interconnection, remedy open data and implementation of eForms, the update of the implementing regulation on public procurement standard forms. Specifications are already available in the first case, while will be drafted in due time for remedy open data and eForms. These reflect the goals of the 2014 procurement Directives, the 2015 Communication on Updating the Single Market and the 2018 Communication on Making Public Procurement work in and for Europe.

3.9.2.3 Benefits and expected outcomes - including EU added value

The digitisation of public procurement contributes to the completion of the Digital Single Market, by aiming to simplify the procedures and the lives of buyers and suppliers, in particular SMEs, as well as to harmonise interfaces and processes. 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 evidence-based governance of public procurement and respect the once-only principle in this area.

3.9.2.4 Use of Building Blocks

eTendering projects must re-use the eDelivery building block.

The re-use of other Building Blocks such as eID, eSignature and Automated Translation, 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. The use of the CEF Building Blocks will automatically solve the issue.

eID through EU-Login is implement in eCertis and Automated Translation is expected to be integrated into eCertis in Q2 2019.

3.9.2.5 Governance, operations and stakeholders involvement

The European Commission is in charge of the operational management of some of the services concerned (eCertis, eESPD and standard forms together with the Publications Office); the Multi-stakeholder Expert Group on eProcurement (EXEP)⁴³ is the advisory body to the Commission for this CEF DSI.

3.9.2.6 Type of financial support

In case of oversubscription, priority will be given to national solutions and the implementation of eForms.

For Generic Services, proposals may be submitted by consortia composed of a minimum of two public or private entities, based in one or more Member States and/or EEA countries participating in the CEF Telecom programme.

⁴³ <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3142>

Title:	Digital Procurement (eProcurement) - Generic Services
Indicative budget:	EUR 3 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	1.5 years
Indicative call publication date:	Q3 2019

3.10 eHEALTH

3.10.1 Background and rationale

The Directive 2011/24/EU on patients' rights in cross-border healthcare⁴⁴ 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.

Health technology is considered 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. Services provided by the eHealth Digital Service Infrastructure (eHDSI) are significantly contributing to the Pillar 1 and Pillar 2 of the Commission Communication on digital transformation in health and care⁴⁵, which are: citizens' secure access to their health data, also across borders; and personalised medicine through shared European data infrastructure.

The objective of the eHDSI is to support Member States in the cross-border exchange of patient data from ePrescriptions and Patient Summaries increasing continuity of care, patient safety, their access to highly specialised care and the sustainability of health systems. The eHDSI will also support developing common identification and authentication measures to facilitate transferability of data in cross-border healthcare. At the other hand, European Reference Networks (ERN)⁴⁶ which 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, 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.

3.10.2 Implementation 2019

3.10.2.1 Baseline

The design and development of the Core Service Platform for ePrescriptions and the Patient Summary started under WP 2015 and continued under WP 2017 and WP 2018. Currently, Core Services develop and maintain the artefacts necessary to enable cross-border exchange of ePrescription and Patient Summaries by the eHDSI deploying countries. In 2017, the Commission supported the Member States in the development and deployment of their National Contact Points for eHealth and introduced the testing and audit frameworks to be used to assess a country readiness to join the Crossborder eHealth Information Services.

The Core Service Platform for the European Reference Networks (ERN), supported by WP 2015, 2017 and 2018, currently includes the Clinical Patient Management System (CPMS) and ERN Collaborative Platform (ECP) allowing secure sharing of patient data and secure communication and information delivery. In particular, the CPMS enables health professionals within ERNs to hold virtual consultation panels across EU national borders to

⁴⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0045:0065:en:PDF>

⁴⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:233:FIN>

discuss the diagnosis and treatment of patients with rare or low prevalence complex diseases or conditions. In 2017 and 2018, both the CPMS and the ECP were customised to the needs of the 24 existing ERNs. Meeting and learning tools will be added in the future.

Concerning Generic Services, 22 Member States were awarded CEF funding to set up their National Contact Points for eHealth to start exchanging cross-border ePrescription and Patient Summary data. The first wave of countries is expected to start exchanging ePrescription and Patient Summaries by the end of 2018. In addition, 24 ERNs were awarded CEF funding from WP 2017 to set up the customized Operational Helpdesk that serves as a first line help for all ERN members and facilitates their use of the CPMS. In Q3 2018, ERNs had the opportunity to apply for WP 2018 funding for the development of innovative e-learning/training solutions or data sets for disease-specific adaptation of the CPMS.

3.10.2.2 New Actions in WP 2019

Core Service Platform

For ePrescription and Patient Summary, including interoperability of electronic health records across borders, three dimensions of activities are envisaged. Governance actions: where eHDSI governing bodies will continue their activities to guide and orchestrate the set-up of the EU Cross-Border eHealth Information Services. Design and Development: refining eHDSI artefacts; implement guidelines and other documents adopted by the eHealth Network and eHDSI governance bodies; pursuing deeper integration with CEF Building Blocks; and preparing for possible new use cases and their Business Requirements under the digital strategy. Operations management: Commission will continue managing the operations of the system by maintaining the stable operation of central IT services; conducting activities established by test and audit frameworks; providing support to deploying countries and to countries already in routine operations.

With regards to the ERNs, the focus will be on maintaining the ECP and the CPMS operations and to work on new modules for ERN e-learning, service directory, monitoring and assessment, expansion and full patient registries. The new functionalities will be added according to the growing needs of the networks. The ERN systems use CEF Building Blocks to the extent possible.

Generic Services

The support will continue to target the set up and further technical development of National Contact Points for eHealth in order to enable the cross-border exchange of data from ePrescription and Patient Summaries. This includes the costs of complying with new requirements for those countries already providing the services. The focus will be both on those countries who still want to join the cross-border exchange of data as well as those countries which have already set up their National Contact Points for eHealth and would like to broaden their services.

No support to Generic Services for the ERNs will be provided in the WP 2019.

3.10.2.3 Benefits and expected outcomes - including EU added value

Overall, in line with the objectives of Directive 2011/24/EU, the deployment of eHealth solutions shall increase 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 a possibility to collect and analyse clinical data across borders to support public health and research.
- The actions foreseen will contribute to the implementation of policy priorities on health and care in the Digital Single Market as set out in COM(2018)233, in particular to promote citizens' secure access to and sharing of health data, as well as data to promote research, disease prevention and personalised health and care.

3.10.2.4 Use of Building Blocks

The eHDSI will continue to partially reuse the eDelivery Building Block. In 2019, when the outcomes of the impact analysis will be known, further work will be undertaken towards the full implementation of the eDelivery Building Block in eHealth.

Some Member States are developing a solution for eID implementation in eHDSI under the CEF ID DSI. Based on the outcomes of the above-mentioned project, further integration of eID into the eHDSI will be pursued. ERN services are using the eID Building Block, namely the EU-Login for authentication of healthcare professionals.

Member States have been informed about the study on the reuse of the eSignature Building Block and will decide whether enlarging the scope of the eHDSI by adding new functionalities.

3.10.2.5 Governance, operations and stakeholders involvement

The governance model of the eHDSI for the ePrescription and Patient Summaries (eHDSI-PS/eP) was adopted by the eHealth Network in November 2015 and revised in November 2016; for the European Reference Networks (eHDSI-ERN), it was adopted by 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 drafted by the ERN IT Advisory Group and submitted to the ERN Board of Member States for approval. Specifications and guidelines will be governed by the relevant bodies through a governance

structure set up by the ERN Board of Member States. Activities to promote the use of the ERN IT platform for research will be coordinated through the concerted efforts of pan-European research infrastructures from the European Strategy Forum on Research Infrastructures (ESFRI), such as ECRIN (European Clinical Research Infrastructures Network) and ELIXIR (European Life-science Infrastructure for Biological Information).

3.10.2.6 Type of financial support

The Core Service Platform will be implemented through procurement contracts.

Title:	eHDSI- Core Service Platform
Indicative budget:	EUR 4 million
Type of financial support:	Procurement - Framework contract(s) (indicative number of contracts: 1 to 10 specific contracts)
Indicative duration of the action:	4 years

For Generic Services, proposals addressing ePrescription/Patient Summary may be submitted by one organisation only (no consortium allowed). Such organisation has to be a legal entity supported by the national authority responsible for eHealth. The maximum co-financing per country is EUR 1 million. Priority will be given to applications of (1) new countries or regions joining the exchange and (2) countries adding new services and creating new exchange possibilities with countries who have already joined the exchange. The possibility to link to the national infrastructure will be an important element of the impact evaluation.

Title:	eHDSI – Generic Services
Indicative budget	EUR 5 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	2-4 years
Indicative call publication date:	Q3 2019

3.11 Business registers interconnection system – BRIS

3.11.1 Background and rationale

Directive 2012/17/EU⁴⁷ 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) - 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.

In May 2018, amendments to Directive 2015/849/EU⁴⁸ on anti-money laundering and counter terrorist financing were adopted. These amendments stipulate that central registers of the beneficial ownership information for legal entities and legal arrangements which are to be put in place by Member States at national level are also to be interconnected as part of BRIS. The BRIS DSI helps 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, the e-Government Action Plan 2016-2020 and the Mid-term review of the Digital Single Market Strategy.

3.11.2 Implementation 2019

3.11.2.1 Baseline

So far, the implementation of the BRIS Core Service Platform 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 and throughout 2018.

The Core Service 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. In 2018, the main actions focused on running the service and providing helpdesk services to the system. The technical tasks also covered a number of improvements, as well as possible contribution to the piloting of cross-border implementation of the once-only principle. A technical helpdesk provided support to the platform users and ensured effective

⁴⁷ 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

⁴⁸ Directive 2015/849/EU of the European Parliament and of the Council of 20 May 2015 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, amending Regulation (EU) No 648/2012 of the European Parliament and of the Council, and repealing Directive 2005/60/EC of the European Parliament and of the Council and Commission Directive 2006/70/EC (Text with EEA relevance)

use of the platform. The Commission also provided hosting for the necessary environments. In addition, the Commission performed stakeholder engagement, communication and change management activities, playing both a steering and facilitator role. The Commission also provided 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.

With regards to the Generic Services, WP 2016 and WP2017 focused on the 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; and, as of mid-2017, operation and maintenance of the access points. WP 2018 did not earmark funding for generic services.

3.11.2.2 New Actions in WP 2019

Core Service Platform

Funding will be necessary in 2019 in order to provide continuity of support services and to ensure efficient evolutive maintenance of the Core Platform, by enhancing or adding functionalities where necessary. Funding is also needed for further communication and stakeholder engagement activities.

Generic Services

The grants for Generic Services will support the Member States to meet the following main objectives:

- Enabling business registers to support the evolving data model and standard messages coming from BRIS, which may involve the upgrade of the existing business registers. This is particularly important for Member States that have less sophisticated or technologically outdated business registers;
- Enabling business registers and/or central registers storing information on beneficial ownership to support the data model and the standard messages coming from BRIS, which may involve the upgrade of the existing business registers;
- Operation and maintenance of access points once in operational mode.

Moreover, all the Generic Services projects 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 the deployment of the eDelivery is included in the proposal, the specific objective of this activity is:

- to deploy access points and/or to operate access points;
- to deploy Service Metadata Publishers and/or to operate Service Metadata Publishers;
- to upgrade data exchange solutions (Commercial Off-the-Shelf (COTS), Open-Source Software (OSS) and other) to support, and therefore fully comply with, the CEF eDelivery standards.

3.11.2.3 Benefits and expected outcomes - including EU added value

The main expected results of the business registers interconnection are: an increase in confidence in the 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 EU 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. The main expected result of the beneficial ownership registers' interconnection is the increase of accessibility and availability of beneficial ownership information of legal entities and other legal arrangement in particular for obliged entities and competent authorities, thus increasing transparency of these structures for the enhancing the fight against money laundering and terrorist financing.

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; support of the once-only principle.

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.

3.11.2.4 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 subsequent integration.

3.11.2.5 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 also provides the user interface on the European e-Justice Portal, which serves as European access point to company data via the central platform. The Member States are connected 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).

3.11.2.6 Type of financial support

Title:	BRIS - Core Service Platform
Indicative budget:	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:	2 years

For Generic Services, proposals may be submitted by Business registers as referred to in Directive 2009/101/EC; business registers and/or central registers storing information on beneficial ownership as referred to in the amendment to Directive 2015/849/EU.

Title:	BRIS - Generic Services
Indicative budget	EUR 2 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	1.5 years
Indicative call publication date:	Q3 2019

3.12 Electronic exchange of social security information– EESSI

3.12.1 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.

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 Council⁴⁹ and Regulation (EC) No 987/2009 of the European Parliament and of the Council⁵⁰.

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.

As the EC developed all the components of the system, including the Reference Implementation of a National Application (RINA), which is covering the national domain of EESSI, the needs in terms of funding for maintenance, evolution and service are rather high. The CEF funding will allow DG EMPL to cope with the very high demand in term of service from Member States and to cover in a very efficient way the interoperability efforts of 32 EEA Member States.

3.12.2 Implementation 2019

3.12.2.1 Baseline

During 2015-2018 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). 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. 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

⁴⁹ 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).

⁵⁰ 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).

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. Several Member States have requested this alternative.
- Integration of the eID and the Automated Translation Building Blocks in RINA.
- Set up of the third and fourth level IT support activities for the national users.
- Direct technical support for technical teams in Member States testing the Access Points and RINA software.

For the Generic Services, in 2016 and 2018, 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. In 2017, several Member States, installed production version of the Access Point and tested RINA production ready release.

3.12.2.2 New Actions in WP 2019

Core Service Platform

- Cover the third and the fourth level IT support activities for the EESSI for which DG EMPL will further develop extensive IT support activities for specialised assistance for Member States' help desks working with the Access Points.
- Provide direct technical support for Member States' technical teams responsible for the installation and integration of the Access Points.
- Further develop functionalities according to the change requests approved by the EC governance and Member States governance and ensure maintenance of CSN, AP and RINA software including the eDelivery AS4.net CEF building block built by DG EMPL;
- Further prepare training material and perform training activities (IT training and business training for trainers) for the Member States.
- Operate and enhance a conformance testing environment for implemented RINA and National Applications.

Generic Services

The CEF WP 2019 will not fund the Generic Services for EESSI.

3.12.2.3 Benefits and expected outcomes - including EU added value

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) 883/2004⁵¹ and 987/2009⁵².

The actions supported in 2019 will allow consolidation 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 that 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. Moreover, the CEF support will allow DG EMPL to further provide specialised training in IT and business areas for trainers from Member States' institutions. This support is indispensable for the successful deployment of EESSI in the numerous social security institutions (22.600) in the Member States.

3.12.2.4 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 2017-2018, the EESSI development integrated the eSignature and eDelivery Building Blocks enriching the cross-domain offer proposed to Member State administrations and currently proposes a help desk for integration and specialised second level support. As from mid-2017 the EESSI deployment uses the Automated Translation building block and also includes eID building block in RINA.

3.12.2.5 Governance, operations

The EESSI project is a joint effort of the Commission and the Member States. For the Commission, DG EMPL is the system owner and solution provider for the central platform and the Reference Implementation of a 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".

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).

3.12.2.6 Type of financial support

The Core Service Platform will be implemented through procurement contracts.

Title:	Electronic Exchange of Social Security Information (EESSI) - Core Service Platform
Indicative budget:	EUR 5 million
Type of financial support:	Procurement - Framework contract(s) (indicative number of contracts: 5 to 10 specific contracts)

⁵¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1455198038927&uri=CELEX:32004R0883>

⁵² <http://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex:32009R0987>

Indicative duration of the action:	1 year
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3.13 European e-Justice

3.13.1 Background and rationale

Since 16 July 2010 the European Commission is operating the European e-Justice Portal ('the Portal') which has been continuously expanded with new content and electronic services further to successive Council e-Justice Action Plans.

In parallel with the development of the Portal, a large consortium of Member States ran the e-CODEX⁵³ Large Scale Pilot to establish a secure system for cross-border electronic communication in the judicial area. Furthermore in 2016, the JHA Council called on the European Commission to create a new IT platform in the e-Justice area for prosecutors and judges to be able to request and receive electronic evidence (e-evidence) in criminal cases.

The work under the European e-Justice DSI is very closely related to activities in the e-Government domain and addresses similar challenges. Its key objectives are to: facilitate access to justice, increase trust, remove practical barriers with respect to access to information and electronic services, improve the speed and efficiency of cross-border proceedings by digital means, and decrease overall costs. In this respect the e-Justice DSI is an important element of the European Digital Single Market.

3.13.2 Implementation 2019

3.13.2.1 Baseline

Core Service Platforms

CEF Work Programme 2018 funding allowed for the continued maintenance and evolution of the e-CODEX Core Service Platform by a consortium of Member States' public administrations.

Outside the scope of CEF funding, the European e-Justice Portal Core Service Platform is being actively developed. DG Justice and Consumers also 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

Thanks to funding from the CEF Work Programme 2016, 2017 and 2018 a number of Member States were enabled to connect to the existing modules of the Core Service Platform.

⁵³ <https://www.e-codex.eu/>

3.13.2.2 New Actions in WP 2019

Core Service Platform

For 2019, a new CSP within the context of CEF would be the development of the generic reference implementation to be used by Member States in the context of the *e-evidence* initiative⁵⁴. Envisaged activities in this respect relate to core and ancillary software design and development tasks, coordination, ensuring interoperability with existing national solutions, rollout activities and the initial support and maintenance following the go live of the e-evidence platform.

The e-evidence CSP's development will be carried out through procurement utilising external software service providers or in-house resources.

Generic Services

Generic Services will continue to be developed, expanding the area of coverage of the various e-Justice CSP modules. This evolution is essential to the usefulness of each service.

The details of the Generic Services depend on the nature of the CSP 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 the e-CODEX system. This can entail the installation of an e-CODEX access point⁵⁵, if not already available, and connecting it to either the European Commission reference implementation or to upgraded national solutions already in place;

Eligible organisations: the competent national public administrations, e.g. prosecutors' offices.

- Access to e-CODEX: support Member States⁵⁶ for joining the European Order for Payment (EOP), the European Small Claims (ESC) pilots, or potentially other priority pilots identified in the e-Justice Action Plan 2019-2023. With regard to the existing workflows - EOP and ESC - priority will be given to 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 will be 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 access point. This will also contribute to the compliance with the requirements set out in the eIDAS Regulation;

⁵⁴ Some preliminary technical work in this regard had already been done in the course of 2017/2018 outside of the scope of CEF.

⁵⁵ Which in itself re-uses the e-Delivery building block.

⁵⁶ Non-EU Member States are excluded from *Access to e-CODEX* for these judicial procedures which only apply to the EU Member States.

- 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 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.

Eligible organisations: the competent national public administrations.

- Interconnection of Insolvency Registers: the national insolvency registers have to implement the agreed web service specification necessary for communication with the CSP;

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

- Integration of electronic multilingual standard forms into national e-government systems: implementation of forms pursuant to Regulation (EU) 2016/1191⁵⁷ of the European Parliament and of the Council in Member States' national IT systems according to the common XML Schema Definitions.

Eligible organisations: public authority competent for issuing or receiving public documents⁵⁸, central authorities⁵⁹, or other public authorities in charge of the implementation of Regulation (EU) 2016/1191.

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.;

⁵⁷ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016R1191>

⁵⁸ As defined in Article 3 (1) (a) of Regulation (EU) 2016/1191

⁵⁹ As defined in Article 3 (6) of Regulation (EU) 2016/1191

- *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).

3.13.2.3 Benefits and expected outcomes - including EU added value

All activities under the e-Justice DSI have a strong EU dimension and added value:

- The electronic exchange of data in the context of e-CODEX and e-evidence can significantly increase the efficiency of justice in a cross-border context. On numerous occasions the need for paper transmissions between competent authorities has been identified as one of the barriers to efficient cross-border justice – the electronic channel offers a cheaper, faster and more secure medium;
- Although Member States have a statutory obligation to complete the interconnection of their insolvency registers by 2019, in reality for many of them this represents a substantial financial, technical or organisational challenge. This system would to the benefit of citizens, businesses and creditors operating across European borders who often need legal certainty and swift access to current information and certainty as part of their economic activities;
- Finally, having standardised electronic representation of the public document forms would allow for an economy of scale. Moreover, this activity would lead to a prompt national capability for the efficient electronic generation of such forms by national systems – offering a clear benefit in the context of free movement of citizens in the Union.

Against this backdrop, the European e-Justice DSI activities will support the Digital Single Market by increasing procedural efficiency, improving interoperability and access to information in a cross-border context and reducing costs.

3.13.2.4 Use of Building Blocks

The European e-Justice DSI reuses the eIdentification, eSignature, eDelivery and Automated Translation Building Blocks as follows:

- E-evidence uses the eDelivery, eSignature and potentially the eIdentification 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 use (none applicable).

3.13.2.5 Governance, operations and stakeholders involvement

The European e-Justice Portal and e-evidence CSPs are co-managed by the European Commission and the Member States. With the exception of the *Access to e-CODEX* CSP, the European Commission takes decisions in agreement with the Member States. A CEF WP 2018 grant aims to ensure the e-CODEX CSP's sustainability until the end of 2020. 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 and its expert subgroups (e.g. the one on *e-evidence*). 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 Commission e-Justice Experts' Group, or are only a small subset thereof.

3.13.2.6 *Type of financial support*

The development⁶⁰ and initial maintenance of the e-evidence CSP will be financed via procurement.

Title:	European e-Justice DSI – e-evidence Core Service Platform
Indicative budget:	EUR 1.5 million
Type of financial support:	Procurement – Commission Framework Contract, 1 Specific Contract
Indicative duration of the action:	2 years

Generic Services will be financed through grants. Proposals may be submitted by a single entity or consortia per module, composed of competent authorities for the respective module and other organisations supporting them, based in one or more Member States and/or EEA countries participating in the CEF Telecom programme. The deployment of an eDelivery solution can be part of the proposal.

Funding further to the Generic Services calls aims to support a limited range of activities, i.e., actions aiming to connect an otherwise existing system and/or set of data using the specific interfaces mandated by the European e-Justice DSI. It cannot be used to fund the development of national systems themselves, or the collection/production of the data.

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 budget	EUR 3 million
Type of financial support:	Grants - Call for proposals
Funding rate:	Up to 75 % of eligible costs
Indicative duration of the action:	2 years
Indicative call publication date:	Q3 2019

⁶⁰ Which also pertains to all related activities such as analysis, project management, testing, rollout, etc.

3.14 eARCHIVING

3.14.1 Background and rationale

Archives are the home of collective memories. They help us in understanding the past and making sense of the present, and they can provide guidance for the future. They add value to societies by safeguarding records and by enabling their retrieval and use. This is recognised in all Member States in the form of legal obligations for public institutions to keep certain data and documents in the national archives and preserve them over time.

Digital resources are also an essential asset in today's businesses, representing knowledge, investments and sources for future revenues. Records must be kept in a way to allow their exchange for business purposes or for the sake of public transparency, or they must be kept confidential, according to their nature and the laws in force. They need to be efficiently protected from manipulation, decay and loss.

Therefore, improving the sustainability of digital archives constitutes a vital contribution to governmental transparency and to the Digital Single Market. But the inherent characteristics of digital archival records, in addition to their rapidly growing volume, make this a challenging task: Digital preservation is not just a matter of storing files, but also about keeping alive the infrastructure that renders the files and makes them useable. The eArchiving Building Block will ease the burden on Europe's archives through technological progress, exchange of best practices and collaboration.

3.14.2 Implementation 2019

3.14.2.1 Baseline

The Core Service Platform of eArchiving Building Block DSI was launched with WP 2018. Following a Call for proposals closing in May 2018, the first steps towards its implementation are underway.

No generic services were funded so far.

3.14.2.2 New Actions in WP 2019

Core Service Platform

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, outreach and collaboration activities shall aim at developing additional specifications and cross-border access services for a broader range of application areas (e.g. administrations, businesses, healthcare, environment, finance, safety-critical systems etc.) as well as at extending the geographical spread.

CEF support should cover:

- Technical activities such as the stabilisation, harmonisation and extension of the existing eArchiving specifications and compliant software, supporting all stages of the document lifecycle; development and operation of a conformance testing service;
- Support to end users, including through an IT helpdesk;
- Training for end users, both specific to eArchiving tools and generally on digital preservation and electronic archiving as needed.
- Stakeholder engagement and monitoring activities for the dissemination and promotion of eArchiving as well as monitoring the uptake with regard to functionality and geographical spread;
- Launching collaborations with other CEF Building Blocks and sector-specific DSIs.
- Service administration for the day-to-day administration and operation.

Generic Services

Generic services for eArchiving will not be funded by the CEF WP2019.

3.14.2.3 Benefits and expected outcomes - including EU added value

With the creation of the eArchiving CEF building block, the number of archives using the solution is expected to increase. This will bring about multiple short-, medium- and long-term benefits, such as:

- reduced cost of implementing and maintaining eArchiving solutions (e.g. economies of scale), and higher efficiency;
- easier ways for data owners to exchange data with organisations or 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;
- 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;
- greater government transparency as a result of improvements in eArchiving capability and public access to archived digital records.

3.14.2.4 Use of Building Blocks

The eArchiving building block is not yet fully operational, but possible synergies with other building blocks and sector-specific DSIs are being analysed.

3.14.2.5 Governance, operations and stakeholders involvement

The Commission (DSI owner) is 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)⁶¹, which fulfils the role of a DSI Expert Group.

3.14.2.6 *Type of financial support*

The core service platform for this building block will be implemented through both a procurement contract and grants. The former will be used for maintaining the DSI, for administrative support, and for contributing to central monitoring and communication activities linked to the CEF Digital web portal. The latter will cover technical development and standards specifications as well as activities to support current and prospective stakeholders. Consortia applying for grants shall consist of at least three public or private independent organisations established in three different EU or EEA countries.

Title:	eArchiving – Core Service Platform: Stakeholder engagement, training, tool development and standardisation activities
Indicative budget:	EUR 2,100,000
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:	24 months
Indicative call publication date:	Q1 2019
Indicative call closing date:	Q2 2019

Title:	eArchiving – Core Service Platform: Contribution to the CEF Horizontal Offices including monitoring, promotion and onboarding support.
Indicative budget	EUR 900.000
Type of financial support:	Procurement – Framework contract (indicative number of contracts: 2 specific contracts)
Duration of the action:	24 months

⁶¹ The European Archives Group is an official Commission experts group established in 2006, bringing together representatives from national archives in EU and EEA countries.

NEW DSIs

3.15 EUROPEAN PLATFORM ON DISINFORMATION

3.15.1 Background and rationale

Today, the Internet has not only vastly increased the volume and variety of news available to citizens but has also profoundly changed the ways citizens access and engage with news. Younger users, in particular, now turn to online media as their main source of information. The easy availability of diverse quality information has the potential to make democratic processes more participatory and inclusive.

Yet, new technologies can be used, notably through social media, to disseminate disinformation on a scale and with speed and precision of targeting that is unprecedented, creating personalised information spheres and becoming powerful echo chambers for disinformation campaigns.

The rise of disinformation and the gravity of the threat have sparked growing awareness and concerns in civil society, both in EU Member States and internationally.

The spread of disinformation also affects policy-making processes by swaying public opinion. Domestic and foreign actors can use disinformation to manipulate policy and societal debates in areas such as climate change, migration, public security, health, and finance. Disinformation can also diminish trust in science and empirical evidence (e.g. recent campaigns against vaccination). It can influence behaviour as well and may encourage people to act in ways that put health and safety at risk.

New actors like fact-checking organizations are emerging within the media ecosystem and can potentially offer an answer to the problem of online disinformation. Fact-checking organisations, together with the academic community, work for a more transparent ecosystem and on dedicated research to (a) better understand scale and scope of disinformation problems and (b) evaluate efficiency of responses. In this respect, access to platforms' data is key to a better understanding the dissemination patterns of digital disinformation.

This work will require an improved access to data to a wide range of legitimate third parties through appropriate APIs, ideally independently governed, while complying with privacy and data protection requirements.

The DSI will support the creation of a collaboration platform among fact-checkers and academics tackling online disinformation⁶². It will support the emerging EU market related to the services provided by fact-checkers. When fully operational, the platform should become self-sustainable by providing digital services to media outlets, social-media platforms, advertisers, and public authorities.

⁶² This DSI is a follow up of the European Commission's Communication of the 26th of April 2018 "Tackling online disinformation: an European approach"

The DSI will be built in two phases. The first phase, starting in 2019, will focus on the development of a core service platform which will then be used to network together National Centres on Disinformation. Such centers represent, at Member State level, coordinated national efforts pulling together an independent multidisciplinary community active on tackling the disinformation issue, including fact-checkers and academic researchers. The second phase, starting when the core service platform will be operational, will support the expansion of NCDs activities and their interconnection to the core service platform through the funding of Generic Services. In particular, NCDs, will provide specific knowledge of local information environments so as to strengthen the detection and analysis of disinformation campaigns, improve public awareness, and design effective responses which are relevant for national audiences. The activities of such NCDs should be independent from any public authority. Member States should only facilitate the cooperation among different actors at national level, without interfering with the activity of NCDs. NCDs might independently decide to cooperate with relevant public authorities in case of national security threats.

Generic Services will aim at providing access to relevant online platform data on a national basis for well-defined research activities on online disinformation; access to public authorities data; supporting the activity and interaction, at national level, of fact-checkers and academic researchers; and other relevant activities, including services to external entities like media outlets, platforms, advertisers, and public authorities.

3.15.2 **Implementation 2019**

3.15.2.1 Baseline

The Core Service Platform will build on the EU fact-checker portal which will be operational by the end of 2018. The portal will offer basic services, such as virtual discussion spaces, repository of false stories, automated translation, for the European network of fact-checkers in order to support their actions to tackle online disinformation.

3.15.2.2 New Actions in WP 2019

Core Service Platform

The support for the Core Service Platform will target the deployment of services through a secure open source and independent European platform which will support and network together the NCDs. The NCDs will be composed of a multidisciplinary community active on tackling the disinformation issue, including fact-checkers and academic researchers.

Such services will be developed both at European and national levels and will aim at increasing the cooperation of European fact checkers as well as the cooperation between independent fact checkers and independent researchers and relevant actors. In particular, the tasks foreseen are the following:

- 1) technical activities aimed to set up a secure single entry point for independent European fact-checkers and academic researchers to
 - Online tools for the verification of online content (text, audio and visual);
 - A unique European repository, built to resist to all attempts to manipulate content, of verified false stories automatically translated in several EU languages.
 - A unique entry point for national and European data repositories;

- Virtual space for exchanging best practises;
 - Automated translation tools;
 - Secure space for access to online platforms' data and mapping of disinformation campaign;
 - A wide repository of scientific article on online disinformation.
- 2) Support and training
- How to use the platform;
 - How to use EU open data portal;
 - Fact-checking practices.
- 3) Service administration and stakeholder engagement
- Daily technical operation and administration of the platform;
 - Support the interaction among the fact-checking network and the academic research community by organising pan-European events and for a for discussion.

The website needs a secure, open-source publishing platform with static webpage element to resist all attempts to manipulate especially the most sensitive content including fact-checks. Technical requirements for a integrated publishing platform should include also version management, website generation, site building, and site coding. The platform needs to be scalable, user friendly and in preference developed by organization subject to EU or EU member state privacy legislation and standards.

In view of the nature of the services requested, the participation in the proposal of relevant stakeholders from different Member States would be regarded as an asset.

Generic Services

Generic services will be funded starting from 2020.

3.15.2.3 Benefits and expected outcomes - including EU added value

The objective is to setup the infrastructure to support the work of an independent European network of fact-checkers and relevant academic researchers. The platform should offer cross-border data collection and analysis tools, as well as access to EU-wide data. This will enable the network to act as trusted flaggers. It will also facilitate deeper understanding of online disinformation and formulation of evidence-based strategies for further limiting its spread.

In the Internet age the circulation of online content, including disinformation, has no physical border. Disinformation campaigns, both from domestic sources or external actors, are often tested in few countries and then repeated elsewhere. Cooperation at European level would prevent the spread of EU-wide disinformation campaigns. Moreover, the platform will facilitate the uptake of good fact-checking practices all over the EU.

Synergies with the Public Open Data DSI could be exploited to offer access to public authorities' data and to computing power to mine this data.

Synergies with the Joint Research Centre Media monitoring service could be exploited as an additional service offered by the platform.

3.15.2.4 Use of Building Blocks

The platform will make use of several CEF building blocks:

- The eID Building Block, exploiting EU-Login identification service
- The eDelivery Building Block will provide means for secure communication between users of the platform.
- The Automated translation Building Block will provide a translation tool to the content posted in the platform.

3.15.2.5 Governance, operations and stakeholders involvement

The platform will be governed by an independent board composed by representatives of the platform users (e.g. fact-checkers, academic researchers, the media, the advertisers and the online platforms). No public authorities will be part of the governing board. The Commission will be part of the board only as an observer in order to ensure the proper deployment of the services.

The board will be responsible of implementing the term of services of the platform, like

- procedure(s) for granting access to the platform from different Member States based on adequate professional and ethical standards in a way to ensure public trust on the work of the platform
- a sound process for the moderation of the content shared in the platform
- procedure(s) to provide/sell services to external entities like media outlets, platforms, advertisers, and public authorities without compromising the independence of the platform.

3.15.2.6 Type of financial support

The Core Service Platform will be funded via procurement.

Title:	European platform on disinformation -Core Service Platform
Indicative budget:	EUR 2.5 million
Type of financial support:	Procurement – open call
Indicative duration of the action:	3 years
Indicative call publication date:	Q3 2019

3.16 BLOCKCHAIN

3.16.1 Background and rationale

The aim of this action is to consolidate the political and technological efforts carried out at EU level in the area of blockchain and distributed ledger technologies to further the delivery of a generic and reusable Blockchain Building Block to be added to the existing ecosystem of CEF Building Blocks.

In this context, a ledger is a database which keeps an immutable record of transactions. Records, once stored, cannot be tampered without leaving behind a clear track. Distributed ledger technologies, blockchain being one, enable a ledger to be held in a network across a series of nodes, with no centralised location and without intermediaries. Enabling user "trust" and the protection of personal data are some of the key elements of a blockchain-based cross-border digital service infrastructure. Improved access to public sector information is also an essential component of the EU strategy on free flow of data, enhancing digital services, stimulating new business opportunities, advancing research and contributing to address societal challenges.

The declaration on a European Blockchain Partnership signed in Brussels on 10 April 2018 commits 26 Member States and Norway to work together in the development of a secure and trusted European Blockchain Service Infrastructure, compliant with the EU acquis, energy efficient and meeting the highest standards of security.

According to the declaration, the signatories will: (a) identify by September 2018 an initial set of cross-border digital public sector services that could be deployed through the European Blockchain Services Infrastructure, and (b) define by the end of 2018 a governance model, functional specifications and framework conditions that are necessary to support the deployment of cross-border digital services through the European Blockchain Services Infrastructure. This milestone has now been completed.

The signatories of the declaration invite the European Commission to: (a) propose blockchain as a new Digital Service Infrastructure under the Connecting Europe Facility (CEF) and (b) continue supporting experimentation of blockchain and distributed ledger technologies through Horizon 2020.

The European Commission aims to increase the availability of (big) data sets for both the public and the private sector (ref. proposed revision of the Public Sector Information (PSI) Directive in the second quarter of 2019 which will start the process with the Member States to identify high value public sector data). A blockchain DSI will provide alternative services to improve access to and quality of the data, while at the same time it will facilitate interoperability across Member States.

The General Data Protection Regulation (GDPR) which entered into force in all Member States in May 2018, strengthens and unifies data protection for citizens across the EU. The blockchain DSI will provide the Member States with capabilities to arrive at GDPR-conformant solutions and to put the user in control over who is using its data.

Since 1 July 2016, the eIDAS Regulation's provisions on electronic identification and trust services in the internal market apply directly in all 28 Member States. For instance, the eIDAS regulation defines the Electronic Registered Delivery Services (ERDS) as a service enabling the transmission of data between third parties by electronic means, providing evidence relating to the handling of the transmitted data, including the proof of sending and receiving the data, and protecting transmitted data against the risk of loss, theft, damage or any unauthorised alterations. Distributed Ledger technologies seem particularly suited to further enhance trust, traceability and security in systems that exchange data or assets.

In the Digital Single Market mid-term review adopted in May 2017, the Commission recognised blockchain and distributed ledger technologies as having significant potential for modernisation of public administrations, generating new business models and to addressing societal challenges.

Blockchain and distributed ledger technologies, with their characteristics of increased data security, shared consensus on the state of data, distribution of data resources and disintermediation, instant availability of data updates to connected parties, contribute to creating the right environment for digital networks and services to flourish, one of the aims of the Digital Single Market.

3.16.2 **Implementation 2019**

3.16.2.1 Baseline

The core service platform of the Blockchain Building Block is to be based on: consolidating and continuing efforts undertaken by ongoing EU projects for instance: DG TAXUD's and DG FISMA's piloting of cross-border digital services based on blockchain and several Horizon 2020 Research and Innovation projects such as "DECODE", "My Health My Data" and others that utilised blockchain applications to enhance digital services across borders.

This action will also be closely aligned with the Research and Innovation action, "DT-GOVERNANCE-05-2019: New forms of delivering public goods and inclusive public services" to be launched under the Horizon 2020 Work Programme 2019 for the societal challenge 6 "*Europe in a changing world - Inclusive, innovative and reflective societies*".

3.16.2.2 New Actions in WP 2019

Core Service Platform

The core service platform of the blockchain DSI will build on and consolidate results from the aforementioned ongoing baseline projects, as well as the work of the European Blockchain Partnership. The action will ensure the technical set-up of a permissioned blockchain infrastructure, national nodes and the EU master node, elaborate core elements such as mechanisms for identification and authorisation, protocols and other components underpinning the services.

The action will also include deployment support, training, service operation and contributions to standards that support interoperability and open interfaces, security, confidentiality and personal data protection compliance of the core service platform.

Generic Services

No generic services are foreseen in 2019.

3.16.2.3 Benefits and expected outcomes - including EU added value

The blockchain DSI will lay the foundations for:

- allowing the Member States to exploit registries and databases and share secure and trusted access to information and transactions recorded through those registries and databases in (almost) real time, in a secure and trusted way, whilst reducing the overall costs of such processes for individual Member States and for the EU as a whole.
- providing a permissioned blockchain solution to be used by the national administrations that is fully compliant with the EU acquis, ensuring in particular compliance with the Directive on security of network and information systems (NIS), the eIDAS Regulation, and the General Data Protection Regulation (GDPR).

This new DSI will also open new avenues for European and multidisciplinary cooperation across the Union, leading to a better understanding of the potential use of blockchain technology to enable and enhance cross-border digital public services.

3.16.2.4 Use of Building Blocks

The blockchain DSI will assess how to re-use the eID building block and will explore further integration of other building blocks.

The activity will also foster the possible re-use of the blockchain building block in the context of CEF DSIs to be further explored (e.g. BRIS).

3.16.2.5 Governance, operations and stakeholders involvement

The Commission is in charge of the set-up, operation and maintenance of the core service platform. In line with the agreed governance structure, the blockchain DSI will be governed by an Operational Management Board supported by an Expert Group. The members of the Expert Group are to be appointed by Member State representatives in the European Blockchain Partnership and the eGovernment Action Plan Steering Board. A stakeholder group will be consulted on a regular basis.

3.16.2.6 Type of financial support

Title:	Blockchain DSI – Core Service Platform
Indicative budget :	EUR 4 million
Type of financial support:	Procurement- Framework contract (indicative number of contracts: 3 to 5 specific contract)
Indicative duration of the action:	1 year
Indicative call publication date:	Q1 2019

3.17 EUROPEAN PLATFORM FOR DIGITAL SKILLS AND JOBS

3.17.1 Background and rationale

The EU is currently facing critical shortages both for basic and advanced digital skills. More than 40% of EU citizens do not have basic digital skills, the number of ICT specialists is not matching the demand, more than 600.000 vacancies are available in the EU, 40% of companies report difficulties in hiring people with the right digital skills.

Digital skills development at all levels – from basic to advanced ones – is needed to allow the take-up of new technologies in the economy, increasing productivity and support growth and at the same time to avoid unnecessary disruptions in the labour market and society. Advanced digital skills are for instance needed for technologies such as high-performance computing, artificial intelligence, cybersecurity, to ensure their wide use and accessibility across the economy and society by businesses and the public sector alike.

The EU has put in place several initiative addressing this challenge, including the Digital Skills and Jobs Coalition (from now on the "Coalition") and its national branches.

The Coalition is an initiative which brings together Member States, companies, social partners, non-profit organizations and education providers, that take action to tackle the lack of digital skills in Europe. The initiative was launched by the EC on 1st of December 2016 in Brussels. Since its establishment in December 2016, the Coalition has already provided more than 10 million trainings and National Coalitions are present in 23 Member States.

All organizations that take actions to boost digital skills in Europe can become members of the Coalition by endorsing the objectives and principles of the Coalition as laid out in the members' Charter. They can also pledge to take action to carry out initiatives to tackle the digital skills gap. Actions range from training unemployed people and giving MOOCs for teachers to giving coding classes for children and innovative training for ICT specialists.

The Coalition tackles the need for digital skills of four broad groups:

- digital skills for all – developing digital skills to enable all citizens to be active in our digital society,
- digital skills for the labour force – developing digital skills for the digital economy, e.g. upskilling and reskilling workers, jobseekers, actions on career advice and guidance,
- digital skills for ICT professionals – developing high level digital skills for ICT professionals in all industry sectors,
- digital skills in education – transforming teaching and learning of digital skills in a lifelong learning perspective, including the training of teachers.

What is needed now is to build a network of national platforms, to further empower National Coalitions, facilitate community building and making the resources usable throughout the EU.

This DSI will support the creation of an EU platform constituting a single point of access to activities for digital skills and enabling collaboration and interoperability among National Coalitions' infrastructures (e.g. websites or portals).

It will provide:

- a repository of existing resources;
- tools for self-assessment of digital competencies;
- non-proprietary MOOCs and other training materials for the acquisition of intermediate and advanced digital competencies;
- an overview of training and stage opportunities provided by the EU, the Coalition and the National Coalitions, possibly with a match-making mechanism;
- a search engine for content available in the National Coalitions' infrastructures;
- a repository of best practices shared by National Coalitions for skills enhancement;
- an interactive space to discuss and share knowledge, policies and strategies to address digital skills gaps and shortages in the labour market;
- a collaborative space for further of activities and content.

When fully operational, the platform should become self-sustainable by providing digital services to citizens, public authorities and companies.

This DSI will be built in two phases.

- The first phase, starting in 2019, will focus on the development of a core service platform (CSP), which will then be used to network together National Coalitions across the EU. The CSP is an infrastructure aimed at sharing resources, services and practices between National Coalitions. All services will be accessed and delivered either at EU level or via interoperable National Coalitions' infrastructures.
- The second phase, starting ideally in the second half of 2019, will support the interconnection of National Coalitions' infrastructures, through a call for Generic Services. Such services will aim at building the interoperable links to the CSP. These links will allow National Coalitions to share their activities and contents, thus making it searchable, accessible, available and usable in the national languages.

3.17.2 **Implementation 2019**

3.17.2.1 *Baseline*

This DSI will build upon the development carried out for the Code Week platform⁶³. The National Coalitions are present in 23 Member States and have operating national infrastructures where they showcase activities and share training materials, where available.

3.17.2.2 *New Actions in WP 2019*

Core Service Platform

The support for the Core Service Platform will improve the existing platform so as to allow the interoperability and collaboration among the National Coalitions' infrastructures.

In particular, the tasks foreseen are the following:

1) Technical activities aimed to set up a secure single entry point for digital skills activities for the features described above:

- An European repository of tools for self-assessment of digital competencies and online materials available in several EU languages (e.g. non-proprietary MOOCs and other training materials for the acquisition of intermediate and advanced digital competencies);
- Publication of training and stage opportunities provided by the EU, the Coalition and the National Coalitions, possibly with a match-making mechanism;
- A search engine for content available in the National Coalitions' infrastructures;
- A repository of best practices shared by National Coalitions;
- An interactive space to discuss and share knowledge, policies and strategies to address digital skills gaps and shortages in the labour market;
- Virtual space for collective creation of content.

2) Service administration and stakeholder engagement

- Daily technical operation and administration of the platform;
- Support the interaction among the National Coalitions also by promoting pan-European events and fora for discussion;
- Animating the community;
- Engaging with user groups;
- Quality control;
- Development of multi-lingual material;
- Helpdesk activities.

The CSP needs to be scalable and user friendly.

⁶³ <https://codeweek.eu/>

Generic Services

Generic services will provide support for the interconnection of National Coalitions' infrastructures. Such services will aim at building the interoperable links to the CSP.

3.17.2.3 Benefits and expected outcomes - including EU added value

The objective is to setup an interoperable infrastructure to link National Coalitions. The platform should provide a single point of access to activities for digital skills development, in different Member States. It will also facilitate a deeper understanding of digital skills needs in the EU.

The project addresses challenges related to the development of the Digital Single Market (DSM): a digitally skilled population is a key component of a fully functioning DSM. All Member States are facing shortages of digital skills and skills mismatches; it is a systemic problem that needs a coordinated response at EU level.

This DSI will support building the infrastructure and the community for the digital skills actions foreseen in the next Multiannual Financial Framework, and notably in the Digital Europe Programme.

Synergies with the Europass Platform could be exploited as an additional service offered by the platform.

3.17.2.4 Use of Building Blocks

The possible re-use of the following CEF building blocks is currently being assessed:

- eID;
- eDelivery;
- Automated translation.

3.17.2.5 Governance, operations and stakeholders involvement

The platform will be governed by a board composed by representatives of National Coalitions as well as the Governing Board of the Digital Skills and Jobs Coalitions and the Commission. The European Commission will own the platform.

3.17.2.6 Type of financial support

The Core Service Platform will be funded via procurement.

Title:	European Digital Skills and Jobs Platform- Core Service Platform
Indicative budget:	EUR 1.5 million
Type of financial support:	Procurement – Framework contract (indicative number of contracts: 1 specific contract)
Indicative duration of the action:	3 years

The Generic Services will be funded via grants. The call will be only open to the National Coalitions of the Digital Skills and Jobs Coalition and networks of actors from the industry,

civil society, training providers, social partners, public authorities who are acting on reducing the digital skills gap in Member States.

Title:	European Digital Skills and Jobs Platform - Generic Services
Indicative budget:	EUR 1 million
Type of financial support:	Grants with multiple beneficiaries
Indicative duration of the action:	3 years
Indicative call publication date:	Q3 2019

4 CONTENT OF THE WiFi4EU CALLS FOR 2019

4.1.1 Background and rationale

The WiFi4EU initiative is 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) to better integrate communities in the Digital Single Market, to give users a taste of Gigabit society, to aim at improving digital literacy and to complement the public services provided in those locations.

In line with the Regulation⁶⁴, the WiFi4EU initiative supports public sector bodies⁶⁵ to offer high capacity local wireless connectivity in these centres of local public life that is free of charge and without discriminatory conditions as an ancillary service to their public mission. Actions duplicating existing free private or public offers of similar characteristics (e.g. quality of service) in the same public space shall not be eligible to receive funding.

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

4.1.2 Implementation 2019

4.1.2.1 Baseline

The WiFi4EU initiative is implemented through a voucher scheme⁶⁶. The WiFi4EU web portal for applicants was launched in Q1 2018. The first WiFi4EU call for proposals was launched on 7 November at 13:00 CET and lasted until 9 November 17:00 CET, with a total budget of € 42 million (2.800 vouchers). In total, 13,198 applications were received, with more than 4,000 clicks within the first 10 seconds. Most of the 2800 successful municipalities signed the grant agreement already in December 2018.

⁶⁴ 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

⁶⁵ As defined in Directive (EU) 2016/2102 of the European Parliament and of the Council

⁶⁶ In accordance with Article 7 of the CEF Regulation "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 foresees 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. Such an agreement shall eliminate the need for Member States to provide an agreement to each individual applicant.". Finally, in line with Article 10(4) of the CEF Regulation "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."

4.1.2.2 New Actions in WP 2019

One or two new calls for applications for WiFi4EU will be launched during 2019 allowing eligible entities to apply for a voucher through the WiFi4EU web portal. Eligible applicants for the calls will be municipalities, groupings of municipalities or associations formed by municipalities. Since the beneficiaries from the calls under the previous work programmes will be in implementation phase of their local WiFi4EU networks, it is expected that the first WiFi4EU networks will become operational and will be continuously monitored.

Wi-Fi installation companies interested in the scheme are invited to register in 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 have access to the list of Wi-Fi installation companies already registered and that have declared to be operating in their area. Any Wi-Fi installation company operating in the EU has the possibility to register on the WiFi4EU portal at any time (*i.e.* before or after the calls); no ranking nor recommendations are made by the Commission on the portal, so beneficiaries of the vouchers are 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. This being said, to be selected by a beneficiary for their local wireless connectivity project, Wi-Fi suppliers must be registered on the WiFi4EU portal.

Soon after the calls for applications are closed, successful applicants (beneficiaries) will receive the WiFi4EU voucher. Beneficiaries 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), have to be borne by the beneficiaries themselves for at least three years. The European Commission does not intervene in the contracting relationship between the beneficiary and its ISP.

The vouchers may cover up to 100 % of the purchase of equipment and its installation cost (CAPEX), up to the value of the voucher (anticipated to be EUR 15.000) without prejudice to the principle of co-financing. The voucher scheme will be implemented in accordance with the Financial Regulation.

Beneficiaries will have one year and a half to procure and complete their local Wi-Fi installation. Upon completion, the WiFi4EU voucher is transferred to the Wi-Fi installation company who can then request payment of the voucher from the Commission.

4.1.2.3 Benefits and expected outcomes - including EU added value

The number of beneficiaries is anticipated to be around 3,400 municipalities 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 contribute to bridging the digital divide, especially in communities that lag behind in terms of digital literacy, including in rural areas and remote locations.

It should further improve access to online services that increase quality of life in local communities by facilitating access to services, for example e-Health and e-Government, and promote the development of local small and medium-sized enterprises innovating in digital products and services.

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

4.1.2.4 Type of financial support

WiFi4EU projects will be financed through low value grants. 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.

Title:	WiFi4EU Grants – Vouchers
Indicative budget	EUR 51 million
Type of financial support:	Grants - Call for applications
Funding rate:	Up to 100% of eligible costs of the CAPEX
Indicative duration of the action:	1,5 years
Indicative call publication date:	Q1/Q2 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. It should be noted that internal outsourcing of studies to other Commission departments based on Administrative Agreements can be used as an alternative to the public procurement.

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 Innovation⁶⁷. 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. The core service platforms will mostly be funded by procurement. Exceptionally, on the basis of art 10.4 of the CEF Regulation, they will be funded by a grant covering up to 100 % of eligible costs. Specific eligibility criteria will be specified in the relevant calls for proposals.

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 agreement⁶⁸ 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 participate⁶⁹ in accordance with the conditions laid down in

⁶⁷ OJ C 323, 30.12.2006, p. 1.

⁶⁸ As indicated in Art.9.1 of the CEF Regulation.

⁶⁹ 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.

the EEA Agreement. Therefore, even when not explicitly mentioned in the Work Programme text, it is intended that all calls for proposals are also opened to EEA countries based on the Decisions taken by the EEA Joint Committee⁷⁰, 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 Union⁷¹.

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 the CEF Programme, 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

⁷⁰ At the moment of writing these are Norway and Iceland.

⁷¹ 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.

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 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 Programme⁷² 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 2019 is shown in the table below. The Commission expects to issue calls for proposals in accordance with this 2019 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 – Q3	Evaluation Call 1
Q3	Call 2 opens
Q4	Information to applicants to Call 1
Q4	Call 2 closes
Q4 – Q1 2020	Evaluation Call 2
Q1 2020	Grant Agreements signed for Call 1
Q2 2020	Information to applicants to Call 2
Q3 2020	Grant Agreements signed for Call 2

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 Council⁷³, to offer local wireless

⁷² <http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html>

⁷³ 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).

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)⁷⁴ 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.

⁷⁴ See: <http://ec.europa.eu/eurostat/web/nuts/local-administrative-units>

6 PROGRAMME SUPPORT ACTIONS

6.1 Studies, communication and other measures

The legal basis foresees the possibility for studies and programme support actions in the field of connectivity and digital service infrastructures aimed at maximising the impact of the EU intervention. Horizontal actions for 2019 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 and other support measures

As an indicative list, 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;
- Synergies with other EU initiatives;
- 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 2019. Indicatively 2 direct new contracts and 2 specific contracts under existing framework contracts will be used.

Total indicative budget: EUR 2.1 million from budget line 09 03 03

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 0.3 million from budget line 09 03 03.

- Communication for WiFi4EU

Total indicative budget: EUR 0.1 million from budget line 09 03 04.

- **IT tools and evaluations** 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 0.1 million from budget line 09 03 03.

- Support to DSI proposals evaluation and project reviews⁷⁵.

⁷⁵ In accordance with Article 204 of the Financial Regulation

Total indicative budget: EUR 0.4 million from budget line 09 03 03.

6.2 Broadband Technical Assistance and other broadband support measures

The CEF WP 2019 will partially fund the Support Facility for the Broadband Competence Offices⁷⁶ (BCO) network.

The tasks of BCO Support Facility involve the organisation and the administration of workshops, trainings, and annual events, and the preparation of videos and other communication material as well as the sharing of experiences and good practices making use of social media, web, shared workspaces, etc.

An indicative overall budget of the Support Facility will be EUR 4 million for a contract duration of four years, of which the contribution from the CEF Telecom Programme is of EUR 1 million from the 2016, 2017 and 2018 Work Programmes. The remainder of the budget, not covered under this Work Programme, is 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 are used.

Broadband Competence Offices themselves will not be financed under this Work Programme.

Total indicative budget: EUR 0.433 million 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.

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 single authentication and for **Wi-Fi installation companies** to provide details of the access

⁷⁶ 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.

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 WP2019 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 2.4 million 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 – Calls for proposals fiches⁷⁷

- Call identifier: CEF-TC-2019-1
- Indicative opening date: 14 February 2019 ⁷⁸
- Indicative closing date: 14 May 2019 ⁷⁹
- Subject area: Generic services for Europeana, eID and eSignature, eDelivery, eInvoicing, Automated Translation, EU Student eCard
- 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.

- Call identifier: CEF-TC-2019-2
- Indicative opening date: 4 July 2019 ⁸⁰
- Indicative closing date: 14 November 2019 ⁸¹
- Subject area: Generic services for Public Open Data, Cybersecurity, eProcurement, eHealth, European e-Justice, European Platform for Skills and Jobs, Business Registers Interconnection System
- 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.

- Call identifier: CEF-TC-2019- 3
- Indicative opening date: 1 April 2019 ⁸²
- Indicative closing date: 14 May 2019 ⁸³
- Subject area: eArchiving (Core Service Platform)
- 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.

⁷⁷ Dates are indicative

⁷⁸ The Director-General responsible for the call may publish it up to one month prior or after the envisaged date of publication.

⁷⁹ The Director-General responsible may delay or anticipate this deadline by up to two months.

⁸⁰ The Director-General responsible for the call may publish it up to one month prior or after the envisaged date of publication.

⁸¹ The Director-General responsible may delay or anticipate this deadline by up to two months.

⁸² The Director-General responsible for the call may publish it up to one month prior or after the envisaged date of publication.

⁸³ The Director-General responsible may delay or anticipate this deadline by up to two months..

- Call identifier: CEF-TC-2019- 4
- Indicative opening date: 4 July 2019⁸⁴
- Indicative closing date: 14 November 2019 ⁸⁵
- Subject area: EU Student eCard (Core Services Platform)
- 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.

⁸⁴ The Director-General responsible for the call may publish it up to one month prior of after the envisaged date of publication.

⁸⁵ The Director-General responsible may delay or anticipate 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 Regulation⁸⁶.
- 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;
 - 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;

⁸⁶ 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.

- 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 Council⁸⁷

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.

⁸⁷ 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 Regulation⁸⁸, 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;
- 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 applications, provided sufficient applications are received from applicants in that Member State or EEA country;

⁸⁸ 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.

- A maximum of 15% 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.