

## 8.9 JOINUP – EUROPEAN COLLABORATIVE PLATFORM AND CATALOGUE (2016.20)

### 8.9.1 IDENTIFICATION OF THE ACTION

Type of Activity	Common services
Service in charge	DIGIT.D2
Associated Services	GROW.F3, CONNECT.H4 CONNECT.F2 DIGIT.D1,B1

### 8.9.2 EXECUTIVE SUMMARY

Information related to interoperability solutions and -initiatives were scattered across Europe in numerous public repositories and governmental websites making it hard for policy makers, IT experts and other interested parties get information on the current status of interoperability in Europe, or to re-use already available solutions in the public sector.

Joinup addresses these problems, by establishing a common platform which combines three services in order to reach the objectives stated above:

1. Observatory functionalities enable different communities, such as NIFO, OSOR and SEMIC to inform their respective users of new events, news, best practices related to a specific domain;
2. Collaborative features allow setting up separate spaces for different collections to cooperatively develop their solutions, or to exchange best practice of a specific sector or domain;
3. Finally, the Joinup catalogue provides a central, federated place for interoperability solutions, which are used and which can be re-used in the public sector across Europe.

The above features allow different initiatives to focus on their core objectives without having to deal with setting up individual websites with similar functionalities to communicate to the public. Joinup not only saves considerable resources compared to setting up individual spaces for specific projects, but also helps these projects gain more visibility and reach their target audience more easily. The Catalogue helps public administrations search for, find and re-use

proven solutions from a central place. The platform also is a common place for digital government professionals to extend the network and best practices.

Joinup has been available since 2011, while the catalogue of interoperability solutions have been launched in 2013. Based on the experience with their usage, the Commission already has launched a major revamping exercise (funded under the ISA programme, which includes both the update of the Joinup platform and also the re-scoping of the catalogue of solutions.

In October 2017, the new Joinup platform went live and from then and in 2018 efforts have been made in order to engage users to participate again, many efforts have been put into migrating existing content and developing new features and functionalities.

In 2019, the action will continue to focus on the following areas:

- Engaging with users, existing ones and attracting more users.
- Increase the visibility and trust in existing IT software and solutions that are on joinup while promoting their share and reuse.
- Maintain and promote the catalogue of solutions –Joinup will further focus on promoting the highest quality, most documented solutions, while also allowing other high quality, and well documented ones to be part of the catalogue.
- Establish federation with existing repository in order to make Joinup as the EU portal for looking interoperable solutions in the area of eGovernment.
- Maintain and promote the European Interoperability Cartography (EIC) within Joinup, which aims at providing a highly structured (according to the EIRA) set of building blocks and solutions to support administrations in providing interoperable public services.
- Further, promote the Joinup platform as authentic source of information around eGovernment and ICT in the public sector in the EU, and a one stop shop for sharing and re-using IT solutions for public administrations in EU.
- Promoting Joinup as a solution itself to be reused by other institutions.

### **8.9.3 OBJECTIVES**

The objective of the action is to help public administrations deliver high quality, interoperable services faster and cheaper by providing them a platform, where they can exchange good practices, and high quality interoperability solutions in the context of public services.

#### 8.9.4 SCOPE

To develop and provide a common technical platform offering a set of services supporting public administrations exchange interoperability solutions and good practices:

1. To develop and maintain the technical Joinup platform
2. To operate the Joinup platform and to provide technical and user helpdesk
3. To further develop and manage the catalogue of interoperability solutions and the European Interoperability Cartography (EIC) on Joinup
4. Establish federation with existing repositories
5. To host the European Catalogue of ICT Standards for Public Procurement.
6. Promoting Joinup as a solution itself to be reused by other institutions
7. Increase awareness about the new platform and gather user feedback
8. Increase user engagement by actively promoting the functionalities of the platform

Out of scope:

- Content creation is not in scope for the Joinup action, except for the Joinup collection, content creation is the responsibility of the Collection Owners

#### 8.9.5 ACTION PRIORITY

Information related to interoperability solutions, interoperability initiatives were scattered across Europe in numerous public repositories and governmental websites making it hard for policy makers, IT experts and other interested parties to be informed on the current status of interoperability in Europe, or to re-use already available solutions in the public sector.

Joinup answers to these problems, by establishing a common platform which combines three services in order to reach the objectives stated above:

1. Observatory functionalities enable different communities, such as NIFO, Sharing and Reuse, OSOR to inform their respective users of new events, news, best practices related to a specific domain
2. Collaborative features allow setting up separate spaces for different communities to cooperatively develop their solutions, or to exchange best practice of a specific sector.

3. Finally, the catalogue provides a central, federated place for interoperability -usable solutions, which are used and which can be re-used in the public sector across Europe.

The above features allow different initiatives to focus on their core objectives and not having to deal with setting up individual websites with the above functionalities to communicate with their public. Joinup not only saves considerable re-sources compared to setting up individual spaces for specific projects, but also helps these projects gain more visibility and reach their target audience more easily.

### 8.9.5.1 Contribution to the interoperability landscape

*The contribution of the action to the interoperability landscape, measured by the importance and necessity of the action to complete the interoperability landscape across the Union*

Question	Answer
<p><i>How does the proposal contribute to improving interoperability among public administrations and with their citizens and businesses across borders or policy sectors in Europe?</i></p> <p><i>In particular, how does it contribute to the implementation of:</i></p> <ul style="list-style-type: none"> <li>• <i>the new European Interoperability Framework (EIF),</i></li> <li>• <i>the Interoperability Action Plan and/or</i></li> <li>• <i>the Connecting European Facility (CEF) Telecom guidelines</i></li> <li>• <i>any other EU policy/initiative having interoperability requirements?</i></li> </ul>	<p>The Joinup action facilitates the sharing and re-use of solutions for public administrations and provides the stakeholders with the means to collaborate.</p> <p>The EIC catalogue documents and publishes information about interoperability solutions related to EU policies of the Member States and the European Commission, with the possibility to host relevant information from other International Organisations, including standardisation activities and bodies. By interoperability solutions, we mean methods, techniques, guidelines, standards, specifications, service descriptions and software artefacts. The listed solutions are organised in multiple dimensions including the four levels of EIF,</p>

Question	Answer
	<p>including technical and semantic interoperability solutions (e.g. standards, metadata schemata), organisational interoperability solutions (e.g. business processes) and legal interoperability solutions (e.g. guidelines on how to achieve legal interoperability, decisions, laws). The catalogue will also include a subset of solutions, which meet certain criteria to be included in the European Interoperability Cartography. The Joinup includes also collections and solutions with policy/initiative with interoperability requirements and referring Interoperability Action plan (e.g. EIRA, IMAPS, NIFO, CEF, SEMIC, Tallinn Ministerial Declaration Collection, ARE3NA, Sharing and Reuse of IT Solutions, INSPIRE)</p>
<p><i>Does the proposal fulfil an interoperability need for which no other alternative action/solution is available?</i></p>	<p>Yes, the observatory functionalities provide a unique access to interoperability information across the EU. It offers also the unique possibility to federate any solution repository using ADMS.</p>

### 8.9.5.2 Cross-sector

*The scope of the action, measured by its horizontal impact, once completed, across the policy sectors concerned.*

Question	Answer
<i>Will the proposal, <b>once completed</b> be useful, from the interoperability point of view and utilised in two (2) or more EU policy sectors? Detail your answer for each of the concerned sectors.</i>	The collections on Joinup (can) cover different sectors and policy areas.
<i>For proposals completely or largely <b>already in operational phase</b>, indicate whether and how they have been utilised in two (2) or more EU policy sectors.</i>	The collections and solutions provide a multi sector approach for instance there are communities on Geospatial, eHealth, eProcurement, eGovernment, e-Justice etc.

### 8.9.5.3 Cross-border

Question	Answer
<i>Will the proposal, <b>once completed</b>, be useful from the interoperability point of view and used by public administrations of three (3) or more EU Members States? Detail your answer for each of the concerned Member State.</i>	Our end-users are indeed from different EU member states and also outside EU (e.g. Uruguay)
<i>For proposals completely or largely <b>already in operational phase</b>, indicate whether and how they have been utilised by public administrations of three (3) or more EU Members States.</i>	Yes, several national repositories (NL, Spain, Greece, Slovenia, Belgium) are federated on Joinup, making their national solutions available for re-use.

#### 8.9.5.4 Urgency

Question	Answer
<i>Is your action urgent? Is its implementation foreseen in an EU policy as priority, or in EU legislation?</i>	In DECISION (EU) 2015/2240 Article 3 (i) it is listed as one of the activities the ISA <sup>2</sup> programme should focus on: the maintenance and publication of a platform allowing access to, and collaboration with regard to, best practices, functioning as a means of raising awareness and disseminating available solutions, including security and safety frameworks, and helping to avoid duplication of efforts while encouraging the re-usability of solutions and standards
<i>How does the ISA<sup>2</sup> scope and financial capacity better fit for the implementation of the proposal as opposed to other identified and currently available sources?</i>	As this activity is part of the legal base, it is considered crucial for the success of the ISA <sup>2</sup> programme.

#### 8.9.5.5 Reusability of action's outputs

Name of reusable solution to be produced (for new proposals) or produced (for existing actions)	Joinup reusable platform
Description	The Joinup platform is available for re-use under an open source licence (EUPL) on Github.
Reference	<a href="https://github.com/ec-europa/joinup-dev">https://github.com/ec-europa/joinup-dev</a>
Target release date / Status	Available
Critical part of target user base	Joinup targets users that can re-use the content (re-usable solutions) the platform provides. So re-use of the content is the biggest focus, re-use of the

	platform itself (for example to setup a central national federated repository) is secondary.
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	<ul style="list-style-type: none"> <li>For old Joinup (Drupal6) was re-used by New Zealand and Vietnam, for new version no re-use yet. The source code (Drupal 8) is now shared via gitbub, it is more easy to re-use than previous Joinup further to this the platform's repository can be reinstalled and reused for the creation of similar linked data portals.</li> </ul>

### 8.9.5.6 Level of reuse of existing solutions

*The re-use by the action (following this proposal) of existing common frameworks and interoperability solutions.*

Question	Answer
<i>Does the proposal intend to make use of any ISA<sup>2</sup>, ISA or other relevant interoperability solution(s)? Which ones?</i>	<ul style="list-style-type: none"> <li>Technical platform: the Joinup platform is based on open source, highly re-usable components (Drupal 8.0, Mailman, Virtuoso, with some customisation for specific features).</li> <li>The ISA semantic specification ADMS, ADMS.AP describes in a standardised manner any interoperability solution. All interoperability solutions in the catalogue of solutions are described using this specification. In addition, the specification is also used to federate interoperability solutions from other national and international repositories.</li> </ul>



Question	Answer
	<ul style="list-style-type: none"> <li>EIRA: the European Interoperability Architecture will be used to organise solutions which are part of the future European Interoperability Cartography (a subset of Joinup catalogue) on Joinup.</li> </ul>
<p><i>For proposals completely or largely <b>already in operational phase</b>: has the action reused existing interoperability solutions? If yes, which ones and how?</i></p>	<p>See above</p>

#### 8.9.5.7 Interlinked

Question	Answer
<p><i>Does the proposal directly contribute to at least one of the Union's high political priorities such as the DSM? If yes, which ones? What is the level of contribution?</i></p>	<p>Yes, in the DSM priorities, the Commission has communicated it will concentrate on standards and interoperability, critical areas to the Digital Single Market. With the implementation of the European Catalogue of ICT Standards for Public Procurement and the interoperability catalogue of re-usable solutions in Joinup, we are at the heart of the DSM priority to help governments, business and citizens have access to free digital tools.</p>

## 8.9.6 PROBLEM STATEMENT

The problem of	Information related to interoperability solutions, interoperability initiatives were scattered across Europe in numerous public repositories and governmental websites making it hard for policy makers, IT experts and other interested parties to be informed on the current status of interoperability in Europe, or to re-use already available solutions in the public sector.
affects	policy makers, IT experts working in or for European public administrations
the impact of which is	The Joinup features allow different initiatives to focus on their core objectives and not having to deal with setting up individual websites with the required functionalities to communicate with their public. Joinup not only saves considerable resources compared to setting up individual spaces for specific projects, but also helps these projects gain more visibility and reach their target audience more easily.
a successful solution would be	Joinup answers to these problems, by establishing a common platform which combines three services in order to reach the objectives stated above: <ol style="list-style-type: none"> <li>1. Observatory functionalities enable different communities (collections), such as NIFO to inform their respective users of new events, news, best practices related to a specific domain</li> <li>2. Collaborative features allow setting up separate spaces for different communities (collections) to cooperatively develop their solutions, or to exchange best practice of a specific sector.</li> <li>3. Finally the catalogue provides a central, federated place for interoperable re-usable solutions, which are used and which can be re-used in the public sector across Europe.</li> </ol>

## 8.9.7 IMPACT OF THE ACTION

### 8.9.7.1 Main impact list

Impact	Why will this impact occur?	By when?	Beneficiaries
(+) Savings in money	Reduced costs through the re-use of common packages integrated into a single hardware/software infrastructure and operated by a single technical service team.	ongoing	European Commission services
(+) Savings in time	As mentioned in the sharing and re-use framework: Applying business models that facilitate the co-creation, sharing and reuse of IT solutions can also generate efficiency and financial gains	ongoing	Member States public administrations and their IT providers Other non-EU public administrations
(+) Better interoperability and quality of digital public service	Member states obtain access to a set of interoperability solutions that can be re-used in their NIF. They could also obtain access to an overview of the different TES that exists to support EU policies. Solutions which could be re-used are not only software systems or parts thereof but also guidelines, methods and techniques, organisational	ongoing	Member states

Impact	Why will this impact occur?	By when?	Beneficiaries
	and legal regulations and formal specifications. The more members states re-use common building blocks, the larger the impact on interoperability between the different member states		
(-) Integration or usage cost	Reduced communication and development costs for projects, resulting from not having to set up individual websites and repositories to publish their solutions to the public.	Ongoing	Member States public administrations and their IT providers

### 8.9.7.2 User-centricity

Before the revamp of the new Joinup different stakeholders and users of the platform were reached out to collect feedback and involve them to redesign the Joinup platform to its new form. Both positive and negative feedback has shown clearly the weak and strong, points of the platform.

Focus on user engagement is a continuous action from the start of the new platform. There are organised meetings, trainings and webinars for the different user communities (collections) to receive and give direct feedback on the use of the new platform.

There is an online and direct communication with the most active collections owners/facilitators that leads to a closer relationship and to better understanding and improvement of the features of the platform.

Additionally, the roadmap and the updated versions are published online, so that users of the platform can see, but also join in the discussions for new features.

## 8.9.8 EXPECTED MAJOR OUTPUTS

Output name	European Interoperability Cartography
Description	The 'European Interoperability Cartography (EIC) is a repository of interoperability solutions for European public administrations provided by Union institutions and Member States, presented in a common format and complying with specific reusability and interoperability criteria that can be represented on the European Interoperability Reference Architecture (EIRA). The EIC contains interoperability solutions that have been identified to be reusable and interoperable in the context of the implementing an EU public policy.
Reference	
Target release date / Status	Q4 2018

Output name	European Catalogue of ICT Standards for Public Procurement
Description	<p>The aim of the European Catalogue initiative is to foster the referencing of existing ICT standards and technical specifications by public procurers through</p> <ul style="list-style-type: none"> <li>• The creation of a centralised repository of reference standards and technical specifications</li> <li>• a coordination and convergence process for the development of MS' strategies to adopt ICT standards (including national catalogues when they exist).</li> <li>• better information on existing standards and technical specifications</li> <li>• guidance on the way to use them</li> <li>• an adequate policy to encourage their use</li> <li>• the adoption of best practices</li> </ul> <p>It also intends to increase transparency for the</p>

	vendors on the public procurement market needs, requirements, and opportunities.
Reference	
Target release date / Status	Q3 2017

## 8.9.9 ORGANISATIONAL APPROACH

### 8.9.9.1 Expected stakeholders and their representatives

Stakeholders	Representatives	Involvement in the action
Member States' public administrations	<ul style="list-style-type: none"> <li>○ ISA<sup>2</sup> Committee</li> <li>○ ISA<sup>2</sup> Coordination Group (or ISA CG equivalent)</li> <li>○ Representatives of national repositories</li> </ul>	
European Commission DIGIT	Service provider for hosting/hosting/Cloud services and project evolution	
European Commission DIGIT	Action owner of “Community building” action	
European Commission DIGIT	Action owner of National Interoperability Framework Observatory (NIFO) action	
European Commission DIGIT	Action owner of “Promoting semantic interoperability” action	
European Commission JRC	Action owner of the ELISE action Owner of the collection ARE3NA	
European Commission CNECT	Owner of the CEF programme and CEF collection Owner of the Tallinn0 Ministerial Declaration Collection	

Stakeholders	Representatives	Involvement in the action
European Commission GROW	Owner of the European Catalogue of ICT Standards for Public Procurement project and Rolling Plan on ICT standardisation collection	

### 8.9.9.2 Identified user groups

We consider 3 main groups:

- The normal end-users, using the platform to share or re-use information
- Owners and facilitators that hold some administrative role on the platform (for example the publication of solutions or the creation of discussions) and that want to engage their members
- Owners of national repositories that want to share their solutions with Joinup

### 8.9.9.3 Communication and dissemination plan

Event	Representatives	Frequency of meetings / Absolute dates of meetings?
Survey on future improvements	Users of the platform, national repositories	Once per year.
Workshops- Webinars- Dedicated meetings	Owners of national, international federated repositories and owners/facilitators of Joinup collections	Several times per year
Joinup website Polls	End-users of the platform	Quarterly or ad-hoc

Event	Representatives	Frequency of meetings / Absolute dates of meetings?
Promotion of collections and solutions (via articles and social media, presentation in events)	All joinup stakeholders	Daily, weekly and upon occasion

#### 8.9.9.4 Key Performance indicators

The KPIs are still under review and some are under definition at the level of Collection. The list has been reduced compared to previous years. This will be the basis for the KPIs to report and to be linked with Monitoring and evaluation action.

Description of the KPI	Target to achieve	Expected time for target
Percentage of first-level-of-support incidents resolved within 2 working days	100%	Quarterly
Number of new active registered members	100	Yearly
Number of new Interoperability solutions made available via Joinup	10	Quarterly
Number of new content items available on the platform (e.g. news, events, discussions)	1000	Quarterly
Number of new solutions repositories federated within Joinup	4	Yearly

#### 8.9.9.5 Governance approach

The project is managed by the Commission (DIGIT.D.2, DIGIT.D.1).

The strategic decisions with regards to the direction of further developments are influenced by evaluating the use of the platform (statistics, helpdesk tickets) and by surveying the end-users and other stakeholders of the platform. A Joinup Steering Committee (quarterly meetings) has been set up (consisting representatives of the above stakeholders in 8.9.9.1) to support the decision making process.



## 8.9.10 TECHNICAL APPROACH AND CURRENT STATUS

The development of Joinup started in 2010, while the platform was launched in 2011. In 2013, Joinup launched an integrated repository of interoperability solutions, which included not only open source software, but also technical and semantic specifications aimed at increasing interoperability among public services. Over the last years, Joinup has become collaborative home to hundreds of Commission and other EU software initiatives and provides a catalogue of thousands of federated interoperability solutions, guidelines, documents and frameworks.

It also provides the technical means to publish several ISA and ISA<sup>2</sup> initiatives, such as the National Interoperability Framework Observatory (NIFO), CAMSS, IMM, ePrior, eTrustex, etc.

Being such a rich and diverse information source has had its challenges. Users found it hard to find relevant information among the plethora of content Joinup provides and to navigate through the dozens of different services.

To address these issues, the Commission has launched 2 parallel projects. One aims at updating the platform itself using modern technologies (full support of mobile devices, better user interface, streamlined workflows), while the other is working on streamlining the catalogue of interoperability solutions.

In October 2017, the first version of the new Joinup platform has been launched and large part of the activities concerned the proper migration of the content and ensuring support to collection owners. During 2018, there has been substantial effort also to support the monitoring of the Tallinn declaration for which Joinup has been chosen as the platform to support it and it required some specific developments.

In 2019, focus will still continue on user engagement and promotion of the platform and further improving the user experience as well as federating more repositories and promote the Joinup as an installable platform.

Work on the catalogue has already started in 2015. First, a new scoping criteria along with a stricter quality check have been defined, which will result in a significant reduction of the catalogue. This will make it easier to promote high quality, well documented solutions and important specifications for public administrations. This work is planned to continue in 2019, so that the catalogue becomes a collection of (only) high quality really reusable solutions.

The action will implement and operate of the EIC (European Union Interoperability Cartography) in cooperation with the ISA<sup>2</sup> action EIA.

In summary, the following activities are planned for 2019:

- Operation of the new Joinup platform, which includes hosting, technical maintenance, the provision of technical and user helpdesk.
- Implementation of additional features in the new Joinup platform based on user demand/needs
- Operating the catalogue of interoperability solutions on Joinup, which includes the federation of new repositories, the assessment of federated and hosted solutions against the new scope and eligibility criteria, the promotion of high quality solutions and other promotion activities.
- Implementation and operating the EIC
- Supporting the Implementation and operation of the European Catalogue of ICT Standards for Public Procurement on Joinup
- Supporting the monitoring of the Tallinn declaration
- High Focus on user engagement via dedicated user communities (collections) on the platform
- Organisation of webinars and trainings on use of the platform

## 8.9.11 COSTS AND MILESTONES

### 8.9.11.1 Breakdown of anticipated costs and related milestones

Phase: Initiation Planning Execution Closing/Final evaluation	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Execution	Cloud infra + DEVOPS	90K	ISA <sup>2</sup>	Q2/2019	Q1/2020
Execution	Joinup Service management (Governance, user engagement, Change management, Catalogue	400K	ISA <sup>2</sup>	Q2/2019	Q1/2020

Phase: Initiation Planning Execution Closing/Fin l evaluation	Description of milestones reached or to be reached	Anticipa ted Allocati ons (KEUR)	Budget line ISA/ others (specify )	Start date (QX/YYYY )	End date (QX/YYYY )
	management (EFIR), 1st line support) (ABC IV)				
Execution	Joinup improvements, new developments and 2 <sup>nd</sup> level support (Digit.D.1)	400K	ISA <sup>2</sup>	Q2/2019	Q1/2020
	<b>Total</b>	890K			

#### 8.9.11.2 Breakdown of ISA<sup>2</sup> funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016	Inception, operational, Execution	1060	
2017	Inception, operational, execution	817	
2018	Execution	990	
2019	Execution	890	
2020	Execution	800	