

**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	DIGIT.D1.D3.B1.B2.B3.B4, GROW.F3, CONNECT.H4.F2, JRC.B6, OP.A1,B1,C3, RTD.B2

**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 to 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 information in the form of structured data with three major 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 communities to cooperatively develop their solutions, or to exchange best practices about a specific sector or domain;
3. Finally, the Joinup catalogue provides a unique federated one-stop shop for interoperability solutions which are effectively used and which can thus easily be re-used in the public sector across Europe and beyond.

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 to gain more visibility and reach their target audience more easily. The Joinup catalogue helps public administrations to search for, find and re-use proven solutions from a “one stop shop”. The platform also is a common place for digital government professionals to extend their network and exchange best practices.

Joinup has been initiated in 2011 (funded under the ISA programme), while the catalogue of interoperability solutions has been launched in 2013.

Based on the usage experience and users feedback, the Commission has launched a major revamping exercise, which included both the update of the Joinup platform and also the re-scoping of the catalogue of solutions.

The Joinup platform has been migrated on 4 October 2017 from version 6 to version 8 of the Drupal open source Content Management System. The migration, in addition to improving user-friendliness and making the platform more intuitive, brought major improvements such as an optimised use on smartphones and other mobile computing devices, a new content structure, a better way of creating/editing content, simplifying the creation of solutions, as well as improved search functionalities, allowing multi-criteria search, etc.

Following the migration, huge efforts have been made in order to better engage users to contribute to the improvement of the platform, not only from a technical (identification and development of new features) but also from a content perspective (provision of content such as news, events, comments into the platform).

In 2019, a successful federation of 2 European Union Member States repositories has been accomplished: the Spanish CTT and the Slovenian NIO.

Other important achievements were the introduction of persistent URIs (PURI) in Joinup for the Architectural Building Blocks of EIRA, so that each user can navigate through the entire EIRA definitions in Joinup without opening a session in CarTool; and the development of the Joinup Licensing Assistant, a unique tool allowing everyone to compare and select open licences based on their content.

The development team of Joinup also did many contributions to the open source community of Drupal reaching more than 15.000 commits in features that can be reused.

In 2020 the action will continue to focus on the following areas:

- Continue to enhance the platform to provide better usability, better support for mobile devices, integration of third-party services, easier navigation, and new features answering to the main needs of stakeholders.
- Further enhancing the catalogue of solutions by federating new repositories managed by public administrations in EU Member States as well as standardisation bodies while removing low quality solutions (e.g. based on consultation and download statistics). Joinup will focus on promoting the highest quality and most documented solutions, while also allowing other high quality, and well documented ones to become part of the catalogue.
- Focusing on the user engagement of existing users and also on attracting more active users.

- Further promoting the Joinup platform as an authoritative source of information around eGovernment and ICT in the public sector in the EU, and as a one-stop shop for sharing and re-using IT solutions for EU public administrations.
- Fostering the reuse and co-development of the platform.
- Ensuring a high level of user support by treating the submitted support requests in a timely and correct way using adequate communication channels.
- Increase the visibility and trust in existing IT solutions made available on Joinup while promoting their sharing and reuse.
- Enabling EU Member States to expose Joinup solutions from their local repositories.
- Further contribute to the Drupal open source community.
- Maintain and update the Joinup Licencing Assistant.

Joinup will help meeting the Specific Objective 5 (Deployment, best use of digital capacity and interoperability) of the upcoming Digital Europe Programme for the period 2021-2027 and more particularly the realisation of the operational objective (c): “facilitate the development, update and use of solutions and frameworks by European public administrations, businesses and citizens, including the re-use of interoperability solutions and frameworks”.

In order to provide sustainability of the Joinup platform ,to facilitate the transition to the DEP Programme and the integration of Joinup in the future Digital Transformation Platform, the budget requested for 2020 will cover the operations, support, maintenance and evolutions of the platform up to end of 2021.

### **8.9.3 OBJECTIVES**

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

### **8.9.4 SCOPE**

To develop and provide an interoperable platform that acts as one stop shop and offers a set of services supporting public administrations to exchange interoperability solutions and good practices. The scope encompasses the following activities:

1. To develop and maintain the technical Joinup platform.

2. To operate the Joinup platform and to provide technical and user helpdesk services.
3. To further develop and manage the catalogue of interoperability solutions available on Joinup
4. To establish and maintain (new) federations with existing repositories.
5. Promoting Joinup as a reusable solution itself to be reused by other public administrations.
6. Increasing awareness about the platform and gather user feedback.
7. Increasing user engagement by actively promoting the functionalities and content of the platform
8. To maintain and update the Joinup Licencing Assistant
9. Ensure the integration of Joinup in Digital Europe.

Out of scope:

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

### **8.9.5 ACTION PRIORITY**

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 to 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 information in the form of structured data with three major 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 communities to cooperatively develop their solutions, or to exchange best practices about a specific sector or domain;
3. Finally, the Joinup catalogue provides a unique federated one-stop shop for interoperability solutions which are effectively used and which can thus easily be re-used in the public sector across Europe and beyond.

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 to gain more visibility and reach their target audience more easily. The Joinup catalogue helps public administrations to search for, find and re-use proven solutions from a “one stop shop”. The platform also is a common place for digital government professionals to extend their network and exchange best practices.

**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>. 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, 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 Joinup includes also collections and solutions with policy/initiative with interoperability requirements and</p>

Question	Answer
	referring Interoperability Action plan (e.g. EIRA, IMAPS, NIFO, CEF, SEMIC, Tallinn Ministerial Declaration Collection including also the monitoring dashboard, ARE3NA, Sharing and Reuse of IT Solutions, INSPIRE, CAMSS, Innovative Public Services, Digital Skills In Public Sector).
<i>Does the proposal fulfil an interoperability need for which no other alternative action/solution is available?</i>	Yes, the observatory functionalities provide a unique access to interoperability information across the EU. It offers also the unique possibility to federate any solutions repository using ADMS v2 and link solutions with the ABBs of EIRA.

### 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 all EU Member States and also outside EU and in addition to this, joinup has collections that outside EU MS (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 EU Member States such as Spain, Greece, Slovenia and Belgium, and other initiatives such as W3C have created collections in Joinup, making their national solutions available for re-use. . In 2019 the Spanish CTT Repository and the Slovenian NIO repository have

Question	Answer
	been federated in Joinup using ADMS v2 and their solutions are thus automatically available on Joinup.



#### 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 source code is available for reuse under an open source licence (EUPL) on Joinup and on Github.
Reference	<a href="https://github.com/ec-europa/joinup-dev">https://github.com/ec-europa/joinup-dev</a> <a href="https://joinup.ec.europa.eu/solution/joinup-source-code">https://joinup.ec.europa.eu/solution/joinup-source-code</a>
Target release date / Status	Available

Critical part of target user base	Joinup targets users that can reuse the content (re-usable solutions) the platform provides. So re-use of the content is the biggest focus, reuse 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>• The previous version of Joinup (based on Drupal 6) has been re-used by New Zealand and Vietnam. There is no re-use yet of the new version. The source code (Drupal 8) is now shared on Github, making it more easy to re-use than the previous. The architecture of the Joinup platform has also been reviewed making possible to reuse some components.</li> <li>• 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, Virtuoso, with some customisation for specific features).</li> <li>• The ISA<sup>2</sup> semantic specification ADMS.AP describes in a standardised manner any interoperability solution. All interoperability solutions in the catalogue of solutions are</li> </ul>

Question	Answer
	<p>described using this specification. In addition, the specification is also used to federate interoperability solutions from other national and international repositories.</p> <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> <li>• Sharing &amp; Reuse: Development of the Joinup Licensing Assistant based in collaboration with the EUPL and OSOR communities.</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</p>

Question	Answer
	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.

## 8.9.6 PROBLEM STATEMENT

The problem of	Scattered and Insufficient information concerning reusable, interoperable solutions for public administrations and know-how about implementing and operating public services
affects	European public administrations
the impact of which is	Inefficient use of taxpayers money, non-interoperable services, slow introduction and reuse of new technologies
a successful solution would be	<p>A central and highly interconnected platform offering richly described, structured information about:</p> <ol style="list-style-type: none"> <li>1) interoperable and re-usable solutions (services and tools) for public administrations;</li> <li>2) studies, cases, guidelines and other content to support the development and operation of efficient public services;</li> <li>3) best practices published by communities of interests.</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	ongoing	Member States

Impact	Why will this impact occur?	By when?	Beneficiaries
	<p>framework: Applying business models that facilitate the co-creation, sharing and reuse of IT solutions can also generate efficiency and financial gains</p>		<p>public administrations and their IT providers Other non-EU public administrations</p>
<p>(+) Better interoperability and quality of digital public service</p>	<p>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 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</p>	<p>ongoing</p>	<p>Member states</p>
<p>(-) Integration or usage cost</p>	<p>Reduced communication and development costs for projects, resulting from not having to set up individual websites and repositories</p>	<p>Ongoing</p>	<p>Member States public administrations and their IT providers</p>

Impact	Why will this impact occur?	By when?	Beneficiaries
	to publish their solutions to the public.		

### 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 since the launch of the new platform. It includes organising 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, and guidelines, videos and all relevant documentation are published online, so that users of the platform can see, but also join in the discussions for new features and learn about the implementations.

### 8.9.8 EXPECTED MAJOR OUTPUTS

Output name	Direct code repository federation
Description	Joinup Solutions can be either federated or hosted directly on Joinup. Hosted solutions must be up-to-date by the solution owner, which requires an action on Joinup after every new release of these solutions. Open Source solutions are often maintained on source code management platforms such as GitHub, the integration with these platforms will increase both the available solutions of Joinup, and the overall data quality of the platform (more up-to-date releases).
Reference	
Target release date / Status	Q4 2020

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 vendors on the public procurement market needs, requirements, and opportunities.</p>
Reference	
Target release date / Status	Q 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</li> <li>○ Representatives of national repositories or other repositories being federated.</li> </ul>	
European	Service provider for hosting/support/Cloud	

Stakeholders	Representatives	Involvement in the action
Commission DIGIT	services and project evolution	
European Commission DIGIT	Action owners of several actions such as: National Interoperability Framework Observatory (NIFO) action, Promoting semantic interoperability (SEMIC), Innovative Public Service, Interoperability Maturity Assessment of a Public Service (IMAPS), Access to Base Registries (ABR), Open PM <sup>2</sup> Project Management Methodology, Sharing and Reuse of IT solutions, EUPL, OSOR, EU-FOSSA 2, EIRA, CEF, CAMSS, e-TrustEx, INSPIRE	
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 Tallinn Ministerial Declaration Collection	
European Commission GROW	Owner of the European Catalogue of ICT Standards for Public Procurement project and Rolling Plan on ICT standardisation collection	
European Commission Publication Office	Owners of ELI	
International Organisations	Representatives of the repositories (etc W3C, ETSI, CEN)	

### 8.9.9.2 Identified user groups

There are 3 main groups:

- Standard end-users, using the platform to share or reuse 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 or international organisations repositories that want to share their solutions via 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 and continuous feedback via a dedicated link to be provided
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
Promotion of collections and solutions (via articles and social media, presentation in events)	All joinup stakeholders	Daily

#### 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 valid registered members	250	Quarterly
Number of new Interoperability solutions made available via Joinup	100	Yearly
Number of new content items available on the platform (e.g. news, events, discussions)	75	Quarterly
Number of new solutions repositories federated within Joinup	3	Yearly
Percentage of visits increase on Joinup pages compared to previous years	5%	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 7.1.9.1) 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, IMAPS, 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, a successful federation of 2 European Union Member States repositories has been accomplished: the Spanish CTT and the Slovenian NIO.

Other important achievements were the introduction of persistent URIs (PURI) in Joinup for the Architectural Building Blocks of EIRA, so that each user can navigate through the entire EIRA definitions in Joinup without opening a session in CarTool; and the development of the Joinup Licensing Assistant, a unique tool allowing everyone to compare and select open licences based on their content.

The development team of Joinup also did many contributions to the open source community of Drupal reaching more than 15.000 commits in features that can be reused.

Some modifications were also implemented to ensure compliance with the new GDPR.

In 2020, 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. User access management will also be improved by using EU Login as identification and access management system.

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.

In summary, the following activities are planned for 2020 and 2021:

- 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.
- Integration with EU Login.
- 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.
- Maintaining the EIC
- 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
- Prepare the transition to Digital Europe platform and prepare the integration of Joinup

## 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	Joinup2 hosting, technical maintenance and provision of technical 2nd line helpdesk. Moderation of user content and editorial work	477	ISA2	Q3 2016	Q2 2018
Execution	Joinup 2 improvements and new developments	400	ISA2	Q2 2016	Q2 2018
Execution	Provision of the common service, catalogue of solutions, EIC and the	1000	ISA2	Q2 2016	Q2 2018

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)
	CAMSS catalogue on Joinup				
Execution	Cloud infrastructure + DEVOPS	360	ISA <sup>2</sup>	Q2/2018	Q4/2021
Execution	Joinup Service management (Governance, user engagement, Change management, Catalogue management 1st line support) (ABC IV)	1600	ISA <sup>2</sup>	Q2/2018	Q4/2021
Execution	Joinup improvements, new developments and 2 <sup>nd</sup> level support (Digit.D.1)	1720	ISA <sup>2</sup>	Q2/2018	Q4/2021
	<b>Total</b>	<b>5557</b>			

### 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	990

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2019	Execution	1090	1.010
2020	Execution	1600	