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.B6
Associated Services	GROW.F3, CONNECT.H3 CONNECT.F2 DIGIT.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 reuse 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 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 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.

Joinup has been available since 2012, 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 2016, the action will focus on the following areas:

• provide better user experience: continue to enhance the platform to provide better usability, better support for mobile devices, easier navigation for users.

- finish the re-scoping of the catalogue of solutions the number of solutions is expected to be reduced from 5000 to less than 1000. Joinup will 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.
- implement the European Interoperability Cartography 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.

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 develop and maintain the catalogue of interoperability solutions and the European Interoperability Cartography on Joinup. The catalogue documents and makes available 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 Organizations, 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, 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.

Out of scope:

User engagement, content creation and community facilitation are not in scope for the Joinup action, but are managed by other actions (mainly the Community building action).

8.9.5 PROBLEM STATEMENT

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 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.

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The main issue with the Joinup platform was related to usability and user friendliness as well as reliance on obsolete technology which is not supported anymore and which did not support new requirements sufficiently (e.g. mobile access).

While the catalogue succeeded in federating more than 5000 interoperability solutions from national and international repositories, experience showed that the majority of these solutions were poorly documented and hence not re-used. The catalogue had difficulties to promote the most re-usable, most useful solutions among the many of medium or low quality catalogue entries.

In the following year, the Commission will continue the revamping exercise to address these issues.

8.9.6 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries

Anticipated benefits

Member States public administrations and their IT providers Other non-EU public administrations	Improving communication and collaboration on common projects (sharing ideas, code and implementations) with Public Administrations.
European Commission services	Reduced costs through the re-use of common packages integrated into a single hardware + software infrastructure and operated by a single technical service team. 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.
Member States	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. A selected set of all these elements which could qualify as best-in-class will constitute an EU Cartography. Since EFIR is a federated repository, Member States can seamlessly exchange interoperability solutions with EFIR and their local installations of the platform. A light- weight federation with non-EFIR repositories became available via the ADMS extended specification for describing any type of IOP assets. EFIP allows analysing the strengths and weaknesses of the Member States in specific interoperability areas.
European	The Commission would use the platform to promote EIS, EIF and
Commission	related concepts and ideas. In addition, the platform enables the EU to analyse the strengths and weaknesses of the Member States in specific interoperability areas and allows measuring the success of the EIS implementation in Europe. Measuring the success of the EIS implementation would be an important aspect of EIS governance. The European Commission is expected to use the platform to document also its own IOP solutions and the ISs which have been implemented to support EU policies.
	The Commission will also acquire a more precise view on the current landscape of different solutions and their interrelationships, possible overlaps, complementarities, needs for interoperability, etc.
European Industry	The access to interoperability solutions like business processes, communication protocols, guidelines and techniques allows the European software industry to develop products, which fit the needs of European public administrations more closely. Therefore, the proposed repository fosters the creation of an innovative European

software market offering interoperable products.

8.9.7 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation, inputs / outputs
Digital Agenda	Interoperability and standards is a cornerstone of the Digital Agenda. Having access to interoperability solutions of all levels and all Member States is, therefore, an important step forward in implementing the Digital Agenda.
eGovernment Action Plan	 2.2.3 of the Action Plan: "The Commission will conduct a study with the MSs, of the demand for cross-border services and assess the organisational, legal, technical and semantic barriers." The action aims to provide a platform to facilitate the development of solutions with the objective to overcome these barriers. 2.3.1: "The Commission will facilitate the exchange of experience, encouraging re-use of successful solutions and applications and exploring new approaches to support the Member States in improving organisational processes".
ISA Action 1.17 – Reusable Inspire Reference	Interoperability is a pre-condition to establish eGovernment. Given the scope of the project, it directly contributes to fulfilling this pre-condition. Via Joinup, ARE3NA will provide semantic assets from INSPIRE for registration in ADMS including the remaining 24 data specifications from the Annex Themes of the INSPIRE Directive, having already provided the details of the nine Annex I themes. These assets offer the basis for potential reuse of INSPIRE in other sectors, as part of the ARE3NA work on missing items.
Platform	The improved organisation of these assets could also be addressed with other ISA actions, depending on Member States demand.
ISA Action 1.1 –Promoting semantic interoperability amongst the European Union Member States	Joinup acts as a platform to support the objectives of the ISA Action 1.1 (e.g. the catalogue of semantic assets, ADMS and ADMS.SW open specifications, which are used to federated solution from national and international repositories, are available on Joinup.eu).
ISA Action 2.8 – Machine Translation Service by the European Commission	Joinup will make use of the services of the machine translation platform to provide automatically translated descriptions of software, semantic assets, etc.

ISA Action 2.14 – Assessment of trans- European systems supporting EU policies	ISA Action 2.14 identifies components and solutions which can be used in supporting EU policies. Solutions, which are re-usable cross-border will be published on the Joinup platform.
ISA Action 4.2.2 – Community building and effective use of the collaborative platforms	Joinup offers the technical place to host the activities of the Community Building action.
ISA Action 2.1. European Interoperability Architecture (EIA)	ISA is developing the European Interoperability Cartography (EICart) of solutions. Once available on Joinup, the collaborative platform of ISA, the cartography will be used for discovering existing solutions which can be reused by public administrations at any level. This will accelerate the delivery of public services in a cost-effective manner.

8.9.8 REUSE OF SOLUTIONS DEVELOPED BY ISA, ISA² OR OTHER EU / NATIONAL INITIATIVES

The action is re-using the following solutions:

- technical platform: the Joinup platform is based on open source, highly re-usable components (Drupal 7.0, Mailman, etc, with limited customisation).
- ADMS, ADMS.AP: this semantic specification was developed under the ISA action 1.1. to describe 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.
- 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.

8.9.9 EXPECTED RE-USABLE OUTPUTS (solutions and instruments)

Output name	Updated Joinup reusable platform		
	The Joinup platform is available for re-use under an		
Description	open source licence. The platform is already re-used by		
Description	the Australian and New Zealander administrations. A		
	new version will be available in 2016.		
Reference	www.joinup.eu		
Target release date / Status	Q3 2016		
Output name	Updated ADMS. AP		
	This semantic specification was developed under the		
	ISA action 1.1. to describe in a standardised manner		
	any interoperability solution. All interoperability solutions		
	in the catalogue of solutions are described using this		
Description	specification. In addition, the specification is also used		
	to federate interoperability solutions from other national		
	and international repositories. An updated version will		
	be available, based on the requirements from		
	stakeholders.		
Reference	www.joinup.eu		
Target release date / Status	Q4 2016		

8.9.10 ORGANISATIONAL APPROACH

8.9.10.1 Expected stakeholders and their representatives

Stakeholders	Representatives		
Member States'	 ISA² Committee 		
public	 ISA² Coordination Group (or ISA CG equivalent) 		
administrations	 Dedicated ISA² expert group 		
	 Representatives of national repositories 		
European Commission DIGIT	Service provider for hosting/house 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	Action owner of the ELISA action
Commission JRC	
European	Owner of the CEF programme.
Commission	
CNECT	
European	Owner of the Catalogue of EU standards project.
Commission GROW	

8.9.10.2 Communication plan

Event	Representatives	Frequency of meetings / Absolute dates of meetings?
	Dedicated ISA ² expert group	1-2 times per year.
Survey on future improvements	Users of the platform, national repositories	Once per year.
Workshops	Owners of national, international federated repositories	Once per year

8.9.10.3 Governance approach

The project is managed by the Commission (DIGIT.B6, DIGIT.A3 and DIGIT.C).

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

8.9.11 TECHNICAL APPROACH

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 ISA² 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 in 2015. 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 Q2 2016, the first version of the new Joinup platform will be launched.

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 (from 5000 to approximately 1000 solutions). This will make it easier to promote high quality, well documented solutions and important specifications for public administrations.

While action has started to eliminate solutions which do not meet the criteria, we expect that this work will end in Q1 2016.

In parallel, the action will overtake the implementation and operation of the EIC (European Union Interoperability Cartography) from the ISA action 2.2 EIA.

As a first step (still in 2015) a new scope and eligibility criteria along with a governance model will be defined for the catalogue (using ISA funding). Based on this criteria, the catalogue will be populated in the course of 2016 (using ISA² funding)

In summary, the following activities are planned for 2016 (the source of funding is given in brackets):

- finalising the development of the new Joinup2 version (ISA)
- deploying Joinup2 (ISA²)
- operation of the Joinup platform (ISA²), which includes hosting, technical maintenance, the provision of technical and user helpdesk.
- further enhances to Joinup2 platform (ISA²)
- revision of the catalogue of interoperability solutions to meet the new scoping and eligibility criteria (ISA)
- operating the catalogue of interoperability solutions on Joinup (ISA²), which includes the federation of new repositories, the assessment of federated and hosted solutions against the scope and eligibility criteria, the promotion of high quality solutions and other promotion activities.
- preparation of scoping and governance model for the EIC (ISA)
- implementation and operating the EIC (ISA²)

8.9.12 COSTS AND MILESTONES

8.9.12.1 Breakdown of anticipated costs and related milestones

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA ² / others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Joinup2 hosting,technical maintenance and provision of technical and user helpdesk	210	ISA ²	Q32016	Q32017
Operational	Provision of the catalogue of solutions on Joinup	200	ISA ²	Q22016	Q22017
Execution	Joinup 2 improvements and new developments	550	ISA ²	Q22016	Q22017
Execution	Implementing and populating the EIC	100	ISA ²	Q22016	Q22017
	Total	1060			

8.9.12.2 Breakdown of ISA² funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016	Operation : Joinup2	210	
	hosting, technical		
	maintenance and provision		
	of technical and user		
	helpdesk		
2016	Operation: Provision of the	200	
	catalogue of solutions on		
	Joinup		
2016	Execution: Joinup 2	550	
	improvements and new		
	developments		
2016	Execution: Implementing	100	
	and populating the EIC		