

1.2 CATALOGUE OF SERVICES (2016.29)

1.2.1 IDENTIFICATION OF THE ACTION

Type of Activity	Common frameworks
Service in charge	DG DIGIT.B6
Associated Services	DG GROW.R4 E3 and R3

1.2.2 EXECUTIVE SUMMARY

A large number of public administration portals have been/ are being implemented throughout Europe with no harmonisation among them in terms of the description of public services and associated information. This lack of harmonisation makes it difficult to link or federate them. Furthermore, public services are often not organised in a user-centric perspective making more difficult the search of the information and the integration of several services around business or live events.

The action is oriented to deliver a set of specifications and solutions to achieve a certain level of interoperability around national and European public services descriptions as well as to facilitate the federation of public services and the creation of national and European catalogues and contribute to the "Single Digital Gateway" action established in the Digital Single Market Strategy.

Under the ISA programme, in collaboration with the representatives of the Point of Single Contacts of the Services Directive in several Member States, a Core Public Service Vocabulary Application Profile was defined as an extension of the ISA Core Public Service Vocabulary in order to cover business events.

Under the current proposal action, the Core Public Service Vocabulary Application Profile (CPSV-AP) will be extended to cover all public services in order to support also life events.

First of all, it will be analysed carefully what are the needs of different stakeholders to make the CPSV-AP applicable to public service descriptions in other domains outside the Services Directive (e.g. public services for citizens, other public services for businesses) and how this action can contribute to the "Single Digital Gateway" action identified in the DSM strategy action plan.

Software tools answering the requirements identified in previous phases for the federation of public services will be assessed for potential re-use (use as the YEST tool developed in the context of the Your Europe portal), newly developed and tested. To this end, a number of interested Member States and European portals will be engaged in order to launch a series of real life pilots in order to test and prove the benefits of adopting the CPSV-AP and the software tools as means to: harmonise the descriptions of public services at national PSCs (Points of Single Contact) and the Single Digital Gateway; federate public services at the national portals and also at the European level; and create ultimately harmonised catalogues of public services.

In parallel, and as a result of the pilots, the data model for public service descriptions will be updated and production releases of the software applications will be implemented. Also, further steps in this action will be planned according to the obtained results and the analysis done previously.

A marketing and dissemination plan will be set up in order to promote this material and raise the awareness of policy makers, developers and other interested parties.

1.2.3 OBJECTIVES

The main objective of the action is to achieve interoperability around national and European service descriptions that would help European public administrations build national as well as cross-border harmonised catalogues of public services.

The action will work towards the fulfilment of these objectives:

- implement some interoperability specifications that will help European public administrations to describe public services a group them under life and business events
- implement solutions to enable the link and federation of national and European public service into a Single Digital Gateway in order to foster them as one-stop-shops;
- test in real life how those solutions can provide the expected benefits and based on the practical results improve them
- promote the federation and in some cases aggregation of the public services offered by the various levels of public administrations into the Single Digital Gateway. This would lead at a later stage to the creation of a European catalogue of public services in various domains;

1.2.4 SCOPE

The objective of the present action will be served through implementing interoperability solutions and running pilots to link the Catalogues of public services existing throughout the EU. Initially the scope was limited to the Services Directive but under ISA² it will be extended to other cross-domains as well.

The main target audience are public administrations, in particular the entities in public administrations that are responsible for the implementation and provisioning of public services and the owners of the public service portals acting as one-stop-shops.

The action will deliver a set of specifications and solutions to achieve a certain level of interoperability around national and European public services descriptions as well as to facilitate the federation of public services and the creation of catalogues. This will help European public administrations to improve the discovery and the provisioning of national and cross-border services.

1.2.5 PROBLEM STATEMENT

Member State public administrations provide various types of public services to their citizens and businesses but in very few cases there is a national/ regional catalogue listing all of them. Different types of approaches are being adopted towards the building of public services and their catalogues

There is usually no standard way of describing and documenting these services. The understanding of services and service implementations are different and even the basic definition of what constitutes a public service differs. Furthermore, there is a lack of an overview of what types of services already exist, often resulting in redundant work and inefficiencies.

The above makes the identification of European public services hard or impossible and creates barriers in the interoperable delivery of public services to end users, citizens and businesses resulting to loss of time and underuse of already available public services.

Some MS have defined their own semantic models to define and describe public services. These semantic models are then followed by competent authorities resulting in a higher level of integration of the various public service portals.

This structured approach should be adopted at EU level in order to obtain Catalogue of Services, ultimately interconnected and federated to each other. It will further make possible the federation of European Catalogues as one-stop-shops of public services to boost the discovery and re/use of cross-border European public services.

1.2.6 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
National and European public portals and one-stop-shops providing information about public services for citizens and businesses (Point of Single Contacts of the Service Directive; eGovernment portals; other business portals)	For relevant European national authorities or agencies: the ability to federate public service descriptions from various sources and the creation of one-stop-shops; the efficient re-use of information available in other Member States and the creation of national and European catalogue of public services. Easier provision of national and cross-border public services following a user centric approach.
DG Grow	Your Europe portal and the future Single Digital Gateway can use the output of the action in order to harmonise the public service descriptions around life and business events and also federate the services at the various portals.
Citizens and businesses	Easier discovery and understanding of the available public services related to business or life events. This is materialised in time savings.

1.2.7 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation, inputs / outputs
Communication on "A Digital Single Market Strategy for Europe", COM(2015)192	The action facilitates the creation of a one-stop-shop catalogue of public services thus contributing to the implementation of the "Digital Single Gateway" concept.
DG GROW- Services Directive and national PSCs	<p>Aims at establishing a single market for services within the EU. Within this Directive, each MS has implemented a Point of Single Contact (PSC) that are online e-government portals that allow entrepreneurs and business to:</p> <ul style="list-style-type: none"> • find out about the rules, regulations and formalities that apply to service activities. • complete the administrative procedures online (by submitting the necessary application forms and supporting documents electronically). <p>The PSC owners provide input to the action to understand which data models are in place to describe public services and what first and second level of business events could be harmonised to group public services.</p> <p>The PSCs could make use of the output of the action for the harmonisation of public service descriptions and the federation of the services at the PSCs.</p>
National catalogues/ portals of public services	<p>In some Member States there are national portals that aim at being one- stop-shops for the access to public services. In fact, these portals provide catalogue of public services containing information about the public services offered by various competent authorities and sometimes also the links to access to the electronic version of the services.</p> <p>The public service catalogues/ portals owners provide input to the action to understand which data models are in place to describe public services and what are the business or life events implemented to group public services.</p> <p>They could make use of the output of the action for the harmonisation of public service descriptions and the federation of the services at various portals and catalogue of services.</p>

Action / Policy	Description of relation, inputs / outputs
DG GROW – Your Europe and other European portals	<p>The life and business events descriptions used at the portal will be taken as input for the works towards the definition of a semantic classification for public services.</p> <p>The portals will provide input to the action to understand which data models are in place to describe public services and what are the business and life events implemented to group public services.</p> <p>Your Europe and other digital gateways could make use of the output of the action's outcome for the harmonisation of public service descriptions as well as for the federation of services at the portals.</p>
SPOCS	<p>SPOCS was one of the Large-Scale Pilots, which was to set up Single Points of Contact and help implement the Services Directive.</p> <p>Deliverables from the SPOCS large-scale pilot were consulted to identify what can be reused in the study on "Catalogue of public services".</p>
ISA Action 1.1 – Promoting semantic interoperability amongst the European Union Member States	<p>Semantic interoperability is one of the basic prerequisites for building public services and linking up service catalogues.</p> <p>The Core Public Service Vocabulary developed in the course of the ISA action 1.1 is used as the baseline to create a semantic interoperable data model based on the ISA Core Public Service Vocabulary.</p>
ISA Action 4.2.5 – Sharing and re-use strategy	<p>Catalogue of services makes use of the sharing and reuse criteria to assess existing solutions that could be reused to facilitate the federation of public services and the creation of catalogue of public services.</p>

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

- The Core Public Service Vocabulary developed in the course of the ISA Action 1.1 is used as the baseline to create a semantic interoperable data model based on the ISA Core Public Service Vocabulary;
- The action makes use of the sharing and reuse criteria to assess also existing solutions that could be reused to facilitate the federation of public services and the creation of catalogue of public services;

- Solutions to be developed by the action are mapped to the building blocks of the European Reference Interoperability Architecture (EIRA) as the first step for their inclusion in the EUCart;

1.2.9 EXPECTED RE-USABLE OUTPUTS (solutions and instruments)

Output name	Analysis on the current situation at MS and European level and on the main needs to federate public service descriptions and create catalogue of public services. Contribution to the Digital Single Gateway action of the DSM strategy.
Description	The analysis will look at the current situation at MS and European level and the main interoperability needs to federate public service descriptions and create catalogue of public services (in terms of interoperability solutions) The analysis will also look at how this action can contribute to the Digital Single Gateway action of the DSM strategy
Reference	
Target release date / Status	The analysis will be completed in the course of 2016

Output name	Extension and promotion of the use of the core Public Service Vocabulary Application Profile
Description	Extension of the data model to facilitate the harmonisation and the interoperability of machine readable descriptions of any type of public service and the grouping of them also around life events. Extension of the CPSV-AP for the provision of multi-lingual labels as well as the definition of taxonomies for life events, for the second level of business events and for services output will be implemented to facilitate the creation of catalogue of public services in all domains. Promotion of the use and adoption of the CPSV-AP by national and European administrations, through the launch of various pilots and other actions.
Reference	https://joinup.ec.europa.eu/asset/cpsv-ap/home
Target release date / Status	The extended version also counting for life events is foreseen in 2016

Output name	Open source tools
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Description	Implementation of open source tools for the automated federation of public service descriptions and for the creation of interoperable catalogue of public services. Among the functionalities provided by those tools, it can be listed the following ones: CPSV-AP mappings, public service description editor, public service description harvester, CPSV-AP validator.
Reference	
Target release date / Status	The pilot implementations foreseen in 2016. Fully production releases expected in 2017

1.2.10 ORGANISATIONAL APPROACH

1.2.10.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	ISA ² representatives from the various working groups and committees.
Member States	Points of Single Contact (EUGO Network) owners; other public service portals and national catalogues at Member State Level
DG GROW	replace by GROW's units in charge and in parenthesis the area)

1.2.10.2 Communication plan

The progress of this action will be communicated on a regular basis to ISA² representatives from the various working groups and committees.

The current technical working group composed of several PSCs owners will be extended. Some meetings by videoconference will be held and also a distribution list will be created to communicate and exchange working documents and other information with the various participants in the working group. All the deliverables and related info to the action will be available in a workspace set-up on Joinup.

Some dissemination and communication material will be produced to raise awareness on the works carried out in this action and in order to engage all interested public administrations.

1.2.10.3 Governance approach

The action will be managed by DIGIT with the support of an external contractor. Whenever major deliverables are to be published, the validation of the MS representatives will be sought.

The current technical working group composed of several Member States from the EUGO Network will be extended in order to hold the technical discussions and build consensus related to the implementation and the piloting of interoperability solutions. This group will count on relevant European and Member States' stakeholders responsible for the provisioning of one-stop-shops of public services and for the creation of national catalogue of public services

1.2.11 TECHNICAL APPROACH

The technical approach will build upon the previous phases carried under Action 1.3, namely:

- Study on the feasibility of building a European Catalogue of Public Services and the potential federating of national catalogues at European level;
- Analysis on existing key business events used across the PSCs of the 28 MS and proposal for a list of first level business events that can be used for harmonisation across-borders;
- Definition of a data model, the core Public Service Vocabulary Application Profile (CPSV-AP) that can be reused by all PSC to federate services under business events that are offered by different competent authorities in order to facilitate the search of info by the end users.
- **An analysis and proposal for a harmonised list of key business events** that can be used across the PSCs to group public services and facilitate the discovery and execution of them.
- Identification of what are the technical solutions used by the PSCs of the participating Member States to facilitate the federation of public services and what others that are missing could be implemented;
- Analysis of public service portfolio management methodologies and ways for modelling and representing them;
- Functional requirements for the implementation of some software applications, open source tools, to facilitate the federation of public services and the creation of catalogues at the national public service portals.

Under the current proposal, the Core Public Service Vocabulary Application Profile (CPSV-AP) will be extended to all public services in order to support also life events.

This way, it will be analysed carefully what are the needs of different stakeholders to make the CPSV-AP applicable to public service descriptions in other domains outside the Services Directive (e.g. public services for citizens, other public services for businesses) and how this action can contribute to the "Single Digital Gateway" action identified in the DSM strategy action plan (what other steps and interoperability solutions could be implemented).

All of this will be discussed in the context of an extended CPSV-AP Working Group that will count on relevant Member States' stakeholders responsible for example for the provisioning of one-stop-shops of electronic services and for the creation of national catalogue of public services.

Software tools answering requirements identified in previous phases for the federation of public services will be developed. To this end, a number of interested Member States and European portals will be engaged in order to launch a series of real life pilots in order to test and prove the benefits of adopting the CPSV-AP and the software tools as means to: harmonise the descriptions of public services at national and European PSCs and thus contribute to the implementation of the "Single

Digital Gateway" action of the DGSM strategy; federate public services at the national portals and also at the European level; and create ultimately catalogues of public services..

In parallel, and as a result of the pilots, the data model for public service descriptions will be updated and production releases of the software applications will be implemented. Also, further steps in this action will be planned according to the obtained results and the analysis done previously.

A marketing and dissemination plan will be set up in order to promote this material and heighten the awareness of policy makers, developers and other interested parties.

1.2.12 COSTS AND MILESTONES

1.2.12.1 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, ISA ² / others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception/ execution	Analysis of the current situation and ways to contribute to the Digital Single Gateway action of the DSM strategy. Extension of the public services data model. Implementation, test and pilot of solutions for the federation of public services descriptions.	250	ISA ²	Q2/2016	Q3/2017
Operation	Pilot operation with some national and European portals	150	ISA ²	Q3/2016	Q2/2017
	Total	400			

1.2.12.2 Breakdown of ISA funding per budget year

Budget	Phase	Anticipated allocations	Executed budget (in
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Year		(in KEUR)	KEUR)
2016	Inception, Execution, Operation	200	
2017	Execution, Operation	200	

1.2.13 ANNEX AND REFERENCES

Description	Reference link	Attached document
CPSV-AP	https://joinup.ec.europa.eu/asset/cpsv-ap/home	First release of the Core Public Service Vocabulary application profile

1.3 DATA COMMUNICATION NETWORK SERVICE (TESTA / TESTA NG) (2016.02)

Type of Activity	Common Services
Service in charge	DIGIT.C.4
Associated Services	

1.3.1 EXECUTIVE SUMMARY

The TESTA network was born from a need to consolidate a number of sectorial applications that were being developed in the 90s and early 2000. A study by GARTNER in 2010 confirmed that TESTA stakeholder still see this project as delivering a value added service and should continue.

TESTA-ng, the 4th evolution of the network, is currently in its final phase of rollout after a public call for tender awarded to T-Systems in 2013. sTESTA, the current active configuration, will be decommissioned by Q1 2016.

1.3.2 OBJECTIVES

The TESTA network service is the continuation of an existing action of the ISA Programme. A number of sectorial networks are currently using the TESTA services for their sectorial applications (OLAF, DG MOVE, DG EMPL, DG ESTAT, DG HOME, DG SANTE, CDT, DG MARE, and DG TRADE). The network is also used by the European Institutions and the European agencies. In addition, the TESTA framework is also extensively used by DG HOME for the implementation of the SIS II and VIS networks, by EUROPOL for the implementation of their own dedicated EUROPOL network. DG TAXUD also plans to use the TESTA NG network. Recently also the General Secretariat of the