ASSESSMENT OF TRANS-EUROPEAN SYSTEMS SUPPORTING EU POLICIES (2016.36)

IDENTIFICATION OF THE ACTION

Type of Activity	Common frameworks
Service in charge	DG DIGIT.B6
Associated Services	CONNECT.H.3, DIGIT.01, DIGIT.B, GROW.B.1 and TAXUD.C5

EXECUTIVE SUMMARY

The European Commission is determined to improve the efficiency on its ICT portfolio management, especially for solutions of trans-European nature having direct impact on the implementation of EU policies.

On the one hand the Commission ITT Governance should rationalise existing IT systems by identifying and eliminating overlaps through reusability.

On the other hand the policy makers i.e. in the context of the recently launched Digital Single Market strategy should make good use of technology in EU legislation, by referring to an updated repository of IT solutions linked with legal and business needs and technically sound.

For the above to happen, the identification, collection, documentation and assessment of Trans European Systems (TES) managed by the Commission on behalf of/jointly with the Member States is needed. TES should be put into a Cartography (TESCart) which means that they all have to be described in a common way using a reference architecture. This reference architecture has been chosen to be the EIRA. The scope of this action includes:

> ➢ the creation of a TESCart based on EIRA that will allow the identification of reusable and interoperable IT solutions to the benefit of the ICT portfolio management of the Commission and in support of the makers of the EU policy-makers.

> ➢ The assessment of the reusability and interoperability levels of the building blocks of each TES

So far, more than 76 TES have been put into the current version of the TESCart and can be easily queried and organised via the CarTool.

Next steps include the update and extension of the TESCart to the entire TES base in the EC and the application and assessment of reusability and interoperability criteria that will increase the reusability potential of TES..

OBJECTIVES

The objectives of this action are:

- To rationalise the portfolio of the Trans European Systems managed by the Commission, through the identification and elimination of overlaps and through maximizing reusability to the benefit of those using these systems, public administrations included;
- To assess/produce/validate reusability and interoperability guidelines that could be used to allow solutions entering the European Interoperability Cartography;
- To allow policy-makers benefit from reusing TES or their parts when preparing EU legislation.

SCOPE

All Trans European Systems developed by the Commission on behalf of/jointly with the Member States and contained in the ICT portfolio of the Commission are in scope. In 2016 the TES base in the EC has been sized in 141 solutions. Member State systems identified by NIFO are also potential targets for inclusion in the Cartography.

More particularly, the following activities fall under the action in question:

- Identify, collect and document using EIRA all concerned TES in a Cartography (TESCart);
- Analyse and identify overlaps, missing modules and reusability possibilities;
- Identify TES that could be included into the European Interoperability Cartography (EIC) when this is ready and/or on the Joinup, as needed;
- Feed back to the Commission's IT Governance to ensure proper decision making in relation to (on-going) rationalisation.

ACTION PRIORITY

Contribution to the interoperability landscape

Question	Answer
Does the proposal directly contribute to implementing the European Interoperability Strategy, the European Interoperability Framework, or other EU policies with interoperability requirements, or needed cross-border or cross-sector interoperability initiatives? If yes, please indicate the EU initiative / policy and the nature of contribution.	Yes. Furthermore the TESCart, one of the products of this action is a cornerstone in the implementation of EIF as captured in the ISA[2] text and in the next communication regarding EIF, EIS and EIRA.
Does the proposal fulfil an interoperability need for which no other alternative solution is available?	Yes. There is no cartography in the EC

Cross-sector

Question	Answer
*Will the proposal, **once completed** be useful, from the interoperability point of view, and utilised in two (2) or more EU policy areas? If yes, which are those?*	Yes. The TESCart is policy neutral
*For proposals or their parts **already in operational phase**: have they been utilised in two (2) or more EU policy areas? Which are they?*	

Cross-border

Question	Answer
*Will the proposal, **once completed** be useful, from the interoperability point of view, and used by public administrations of three (3) or more EU Members States?*	Yes.
*For proposals or their parts **already in operational phase**: have they been utilised by public administrations of three (3) or more EU Members States?*	

Urgency

Question	Answer
Is your action urgent? Is its implementation foreseen in an EU policy as priority, or in EU legislation?	Yes. It is captured in the ISA^2 text
Does the ISA^2 scope and financial capacity better fit for the implementation of the proposal as opposed to other identified and currently available sources?	Yes. Reusability and interoperability is in the core of the TESCart

Reusability of action outputs

Name of reusable solution	TESCart
Description	TES cartography in the EC
Reference	
Target release date / Status	July 2017
Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	

Name of reusable solution	Rationalization proposals
Description	Study
Reference	
Target release date / Status	September 2017

Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	

Name of reusable solution	Interoperability Quick Assessment Tookit
Description	Common guidelines, tool, methodology and criteria for solution owners to assess the level of interoperability of a solution
Reference	
Target release date / Status	October 2016
Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	

Name of reusable solution	Reusability Assessment Toolkit
Description	Common guidelines, tool, methodology and criteria for solution owners to assess the level of interoperability of a solution
Reference	
Target release date / Status	December 2017
Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	

Name of reusable solution	RUS&IOP service published in DIGIT catalogue of services
Description	The Reusability and interoperability assessment service will target one solution in production or a solution proposal. The outcomes will be documented in a service report including 1) recommendations to increase the RUS level of the solution, 2) recommendations to increase the IOP level of the solution and 3) identify its full potential for reuse by creating a map of the complete addressable target of policy areas of the Commission where it could be reused. This service will be delivered/tested with IMI and two other solutions and up to two Member states
Reference	

Target release date / Status	December 2017
Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	

Name of reusable solution	DOC service published in DIGIT catalogue of services
Description	The documentation service will target one solution in production, development or proposal phase. The outcomes will be documented in a service report including 1) the EIRA conformance documentation of the solution using the CarTool 2) The assessments of DQ, RUS and IOP, 3) the inclusion of the documentation on the cartography and 4) map of the full addressable target of policy areas where the solution could potentially be reused. This service will be delivered/tested with 2 selected out of the 53 TES in task 4 and in three member states. These tests in three Member States will overlap the up to two tests of the RUS&IOP service in Member States
Reference	
Target release date / Status	December 2017
Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	

Name of reusable solution	TESCart service published in DIGIT catalogue of services
Description	The TESCart access service will target any ad-hoc request concerning solutions that could be (partially) answered via queries to the TESCart. The outcomes will be documented in a service report including 1) the formulated queries and their answers using the CarTool 2) An interpretation of the results including references to the observed DQ, RUS and IOP levels, 3) findings/conclusions and 4) recommendations. This service will be delivered/tested with the deliverables of task 5 and, if they arrive, up to 3 ad-hoc requests.
Reference	
Target release date / Status	December 2017
Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational	

phase - actual reuse level (as compared to the defined critical part)	

Name of reusable solution	Rationalisation benchmarking service published in DIGIT catalogue of services
Description	The rationalisation benchmarking service will target two solutions in production. The outcomes will be documented in a service report including 1) benchmark analysis from the rationalisation perspective including DQ, RUS and IOP assessments 2) rationalisation scenarios and 3) recommendations. This service will be delivered/tested with two solutions
Reference	
Target release date / Status	December 2017
Critical part of target user base	Solution architects, business analysts, IT portfolio managers
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	

Level of reuse by the proposal

Question	Answer
Does the proposal intend to make use of any ISA[2], ISA or other relevant interoperability solution(s)? Which ones?	Yes. Synergies and reuse is expected with EIA (EIRA), Base Registres, EFIR and Joinup
For proposals or their parts already in operational phase: has the action reused existing interoperability solutions? If yes, which ones?	+76 TES has been already documented in the TESCart The rationalisations proposals produced had taken the TESCart as the main source of input

Interlinked

Question	Answer
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?	Supporting cross-border public services is key for the once-only principle.

PROBLEM STATEMENT

This action addresses the lacking of a cartography in the EC and therefore the risk of development roadmaps in silos. This affects the Commission responsible services (policy-makers, ICT decision-makers, portfolio managers, etc.) in their endeavour to rationalise its ICT portfolio and properly reuse ICT solutions in the preparation of EU legislation.

The impact of the problem includes inefficient decision-making and possible duplication of effort in the development of ICT solutions due to difficulties in identifying reusable elements. This in turn results into higher cost and longer development time with no guarantee of openness and interoperability.

EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	• More streamlined interfacing/integration with less EU systems; • Reduced training efforts as a fewer IT tools are used; • Shorter time to obtain IT tools for new areas; • Boost for e-government policies.
Commission Services	• Reduced IT development and maintenance costs; • Reduced training, helpdesk and awareness raising costs ; • Shorter time to deliver IT solutions for new areas; • Better quality due to reusing existing (proved) solutions and/or their modules.
(Indirectly) EU citizens and businesses	• Better digital services delivered by public authorities

ORGANISATIONAL APPROACH

Expected stakeholders and their representatives

Stakeholders	Representatives
European Commission Services	Policy units in the DGs, responsible for the setup of EU systems supporting exchanges between Member states and with EU institutions
IT Governance of the Commission	DG representatives
Member States Public Administrations	Relevant departments responsible for the information systems connected to or using the TES

Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
ISA^2 Committee/Coordination/work group meetings	Member States representatives	At least yearly.
Internal dedicated Commission meetings	Policy DGs	Ad-hoc

Governance approach

The action will be managed by DIGIT as well as CONNECT, GROW and SANCO as associated DGs with the support of an external contractor and in close collaboration with the Commission DGs owners of the concerned TES.

TECHNICAL APPROACH AND CURRENT STATUS

Up until 2013 the TESCart included 58 TES and provided a set of rationalization recommendations to the IT Governance of the Commission.

In 2015 the EUCart was updated with the latest version of the EIRA, started using the CarTool as the technical means for its organisation/presentation and extended to more than 75 solutions including 9 base registries. The EUCart is meant to feed into the European Interoperability Cartography (EIC). It is the playground to practise/validate outputs coming from relevant action, i.e. reusability criteria, EIRA, base registers, etc.

In 2016 The TESCart was migrated from the PoC to a free of charge solution accessible via the CarTool. Additionally, an Interoperability Quick Assessment Toolkit will be released in October 2017 allowing solution owners to perform a quick assessment of the interoperability level of their solutions.

Briefly, in 2017 the action will:

- Gradually replace questionnaires by the CarTool in the data collection of the remaining TES until achieve the entire 141 base of solutions in the EC
- Assess the RUS and IOP levels of all TES and their components
- Promote user awareness of the TESCart in the EC
- Develop and publish service in the DIGIT catalogue of services to promote the exploitation on demand of the TESCart
- Start promoting the EC lessons learned on the TESCart in the Members States supporting their implementation of national cartographies via pilots

COSTS AND MILESTONES

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)
	• Constantly maintain/extend the TESCart • Test reusability and interoperability criteria on TES • Deploy services in DIGIT catalogue of services	▪ 397	ISA^2	Q2/2016	Q1/2017
	Total	397			

Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016		200	200
2017		197	