1.5 TRUSTED EXCHANGE PLATFORM (E-TRUSTEX) (2016.19)

1.5.1 IDENTIFICATION OF THE ACTION

| Type of Activity	Reusable generic tools
Service in charge	DIGIT B.4
Associated Services	DIGIT B.2, SG A.1, JUST B.2, COMP R.3, TAXUD C.5

1.5.2 EXECUTIVE SUMMARY

More and more data is exchanged between administrations. According to our estimates European policy additionally increasingly requires the data to be exchanged electronically (see *Problem Statement* section). This action aims to support public administrations in their implementation of these policies, enabling them to exchange data electronically in a secure, reliable and interoperable way through re-use.

In parallel, the CEF programme and the Large Scale Projects funded under the CIP programme provide pan-European exchange platforms. They, however, require integration with the back-end systems of their re-users in order to achieve end-to end coverage and interoperability. To address the above problem, e-TrustEx also helps public administrations to link their national systems to the pan-European exchange platforms.

The e-TrustEx solution is already operational and the platform is offered to the EU Institutions as a service and to the Member States as an open source software tool.

This action intends to keep the operation and the maintenance of the platform live, to provide support to re-users and improve the service offering.
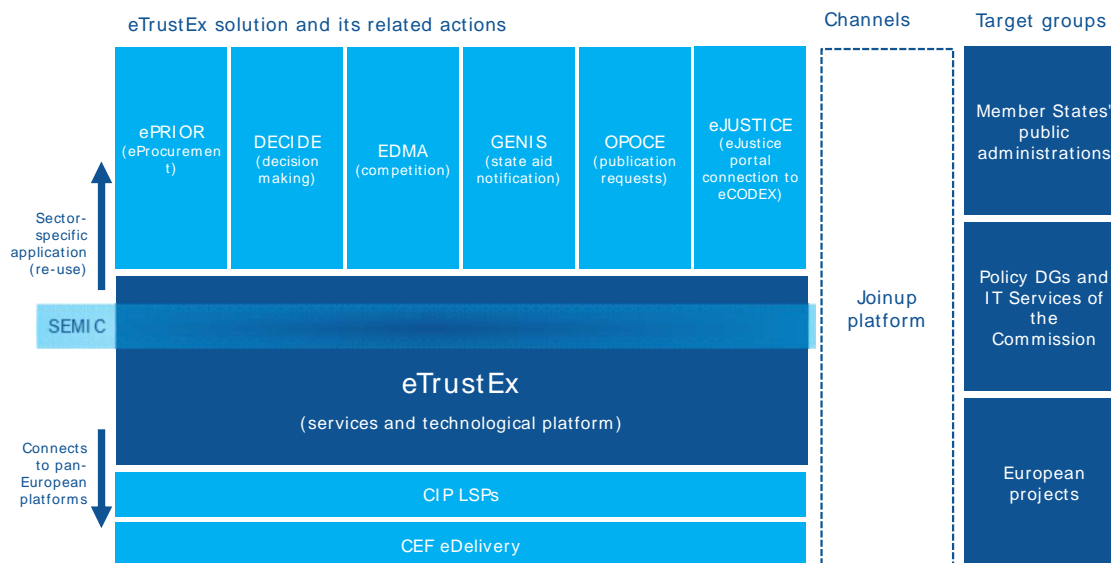
1.5.3 OBJECTIVES

The main objective of this action is to support the secure, electronic exchange of documents and information between public administrations through the use of the e-TrustEx software. e-TrustEx enables the automation of document exchange and offers value added services such as validation and routing of documents as well as the ability to send large messages. Thanks to the Open Source policy, Member States will be able to re-use and extend it themselves for their own specific needs at national, regional or local level.

By fulfilling these objectives, the action will not only stimulate trusted information exchange, but also a cohesive interoperability architecture founded on re-use of work and reduction of redundancy, in line with the priorities of the European Interoperability Strategy and the Digital Single Market Strategy.

1.5.4 SCOPE

In scope: The e-TrustEx platform is offered to the EU Institutions as a service and to the Member States as a tool. This action covers:
- Development of additional features and improvements within the e-TrustEx platform, increasing its value in both cases;
- Operations of the platform for the EU institutions that reuse it in service delivery mode; and
- Support on technical aspects both to its existing users and for Member States willing to re-use the platform. This includes activities such as support of deployment, integration, specifications of the technical interface and of the several components of the platform, debugging and testing, etc.

Out of scope: Implementation of back-office integration is not covered by this action and should be complemented by Policy DGs using their own budget. The Policy DGs should additionally fund the provision of specific support to their users and the development of custom (non-generic) functionality and extensions. Member States' administrations adopting the platform should equally manage the hosting, the specific support and the development of specific functionality and extensions. The exchange of classified documents is also out of the scope of this action.

1.5.5 PROBLEM STATEMENT

Public administrations exchange increasing amounts of information and the current ways of exchange are often unreliable and unsecure (e.g., via e-mail or via paper documents, CDs or DVDs exchanged via postal mail, faxes, etc.). This is confirmed by the "9th Benchmark Measurement of European e-Government services"[1] which shows that there is an increasing need of the Member States for a secure electronic delivery platform.

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[1] https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/egov_report.pdf
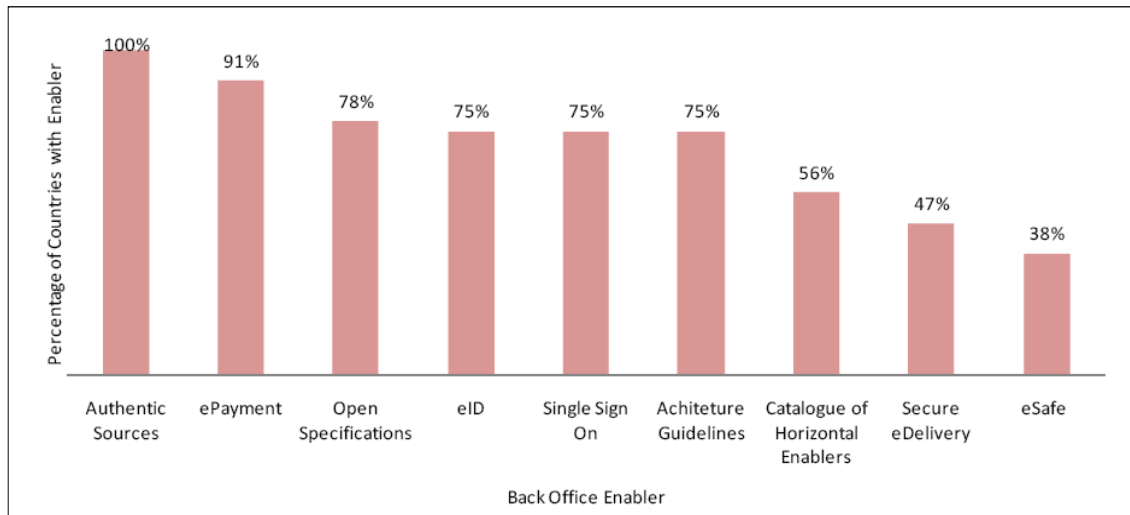
A survey carried out by the e-TrustEx project team in 2010 confirms the same trend. The survey also shows that the Member States believe the European Commission should promote the re-use of a common set of building blocks for cross-border data exchange. In addition, European policy increasingly requires information between public administrations in the EU Member States to be exchanged electronically. This action supports the implementation of these policies by public administrations in the European Union and introduces interoperable, secure and reliable exchange possibilities.

The e-TrustEx architecture and its components are also re-used by the CEF[2] e-Delivery project to allow greater ease of connectivity of back-end systems to the CEF and the e-SENS e-Delivery solutions and of directly submitting documents to such networks through a graphical user interface. e-TrustEx already provides integration with CEF e-Delivery which includes the e-Delivery framework coming from the eCODEX[3] Large Scale Project (EBMS3/AS4) as well as the PEPPOL[4] Large Scale Project. These integrations are integral to achieving a pan-European interconnection among existing information exchange communities. Each of these pan-European exchange platforms offers generic and highly reusable components and services; however, if not integrated, the lack of "end-to-end" coverage (including the "last-mile") and interoperability between them may hinder their actual re-use. Therefore the components developed by this action are reused to provide a connector, helping public administrations to link their national systems to the pan-European exchange platform CEF eDelivery.

1.5.6 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations and	- Switching from registered post to digital exchange of information reduces the cost of these exchanges (as an example, in France around 25 to 40 million letters with delivery receipt are exchanged by

[2] http://ec.europa.eu/digital-agenda/en/connecting-europe-facility
[3] http://www.e-codex.eu/home.html
[4] http://www.peppol.eu/

EU institutions	public administrations – around 4€ to 5€ each). - Enable the creation of a European ecosystem of electronic message exchange which can serve several sectors requiring cross-border exchange of information. This will create economies of scale avoiding that each sector develops a specific solution, - Increase the security and reliability of information exchange and in the same time reduce the manual work involved in the process. - Cost savings and improved efficiency by ensuring interoperability of information exchange at European, national, regional or local level. - Provide free-to-use open source tools for national parliaments and permanent representations to send and receive electronic legal documents and metadata. - Experience, lessons learnt specifications, tools and components published as open source reusable by any Member State or EU Institution.
Policy DGs and IT services of the Commission	The European Commission, because of its trans-national position, is more and more called upon to develop systems to coordinate political actions in various fields. Having a generic system, like e-TrustEx, in place and widely used would be a very big progress for the whole interoperability issue in Europe and would also represent important cost savings.
European projects	Cost and time savings to connect to pan-European infrastructures

1.5.7 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation, inputs / outputs
Digital Agenda	**Action 27: Member States to implement Malmö and Granada declarations** Member States should implement commitments on interoperability and standards in the Malmö and Granada Declarations by 2013. **Action 26: MS to implement European Interoperability Framework** Member States should apply the European Interoperability Framework at national level by 2013. http://ec.europa.eu/information_society/digital-agenda/index_en.htm
DSM Strategy	The e-TrustEx action contributes to boosting competiveness through interoperability and standardisation, which is explicitly mentioned in the communication "A Digital Single Market Strategy for Europe" http://ec.europa.eu/priorities/digital-single-market/docs/dsm-communication_en.pdf
The eGovernment	**Action 33 "Exchanges of expertise, promotions of the re-use and sharing solution to implement interoperable eGovernment services"**

Action Plan 2011 – 2015	The Commission will organise exchanges of expertise and promote the re-use and sharing of solutions to implement interoperable eGovernment services. This includes establishment of interfaces to gain access to and use authentic national sources. **Action 40 Pilot projects for innovative architecture and technologies in eGov** The Commission will launch pilot projects to demonstrate how public administrations can deliver eGovernment services in a more flexible and efficient way by using innovative architecture and technologies. http://ec.europa.eu/information_society/activities/egovernment/action_plan_2011_2015/index_en.htm
eIDAS Regulation	Regulation on electronic identification and trust services for electronic transactions adopted at end of 2014 which will further foster interoperability and will reduce barriers in the internal market. http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.257.01.0073.01.ENG
DECIDE	The eTrustEx platform is used to send the documents issued from the decision making process to the National Parliaments, permanent representations and to the other EU Institutions.
ISA Action 1.11 – GENIS	The e-TrustEx platform will be used when developing the GENIS Information System, to provide efficient, trusted and transparent exchange of data (structured and unstructured) between the Commission (COMP, AGRI, and MARE) and Member States administrations within the State Aid Notification Process.
ISA Action 1.7 – ePrior	The e-TrustEx platform is used within the ePrior ISA Action 1.7
eJustice portal of DG JUST	The eTrustEx platform is used to connect the eJustice portal to the eCodex eDelivery network.
ISA Action 4.2.4 – Joinup	The e-TrustEx platform is made available via the ISA Collaborative Platform (Joinup) Action 4.2.4
ISA Action 1.1 – Promoting Semantic interoperability Amongst the European Union Member States	IMMC Metadata (Interinstitutional standard metadata defined in the context of the decision making process) files are transferred to EU stakeholders and Members States through eTrustEx.
ISA Action 2.9 – Document repository services for EU policy support	eTrustEx will be integrated with the existing open source document repository services.
CEF eDelivery	The eTrustEx is integrated with the CEF eDelivery network and can be

DSI of DG CONNECT and ISA Action 1.6 – 1.19, CIPA	used by the Member States as a connector to link national systems to the network.
CIP LSPs – DG CONNECT	eTrustEx is integrated with the solution deriving from the convergence of the eDelivery solutions of the CIP Large Scale Pilots.

1.5.8 REUSE OF SOLUTIONS DEVELOPED BY ISA, ISA[2] OR OTHER EU / NATIONAL INITIATIVES

This action was originally initiated to make best use of the components developed under the e-PRIOR ISA Action 1.7 by generalising, customising and extending them in order to allow automated document exchanges in different domains, such as legislative and competition related documents. Through the activities undertaken to generalise the components of e-PRIOR, the platform now provides a solid basis for exchanging information and automated document exchange choreographies. This resulting platform is now instead reused by e-PRIOR, where e-PRIOR implements the business specific layer on-top of generic exchange services offered by eTrustEx and represents therefore an instantiation of eTrustEx services in a specific business context.

Reuse of solutions developed by the ISA action "CIPA - Common Infrastructure for Public Administrations Sustainability" (ISA action 1.6 and 1.19) by integrating the software components of eDelivery to the eTrustEx platform.

Planned reuse of ISA Action 2.9 "Document repository services for EU policy support", integrating the upcoming open source document archiving system with eTrustEx.

1.5.9 EXPECTED RE-USABLE OUTPUTS (solutions and instruments)

Output name	Updated e-TrustEx open source software package
Description	The e-TrustEx open-source software package is offered to Public Administrations at European, national and regional level to set up secure exchange of digital structured and unstructured documents from system to system via standardised interfaces.
Reference	https://joinup.ec.europa.eu/software/openetrustex/description
Target release date / Status	continuous updates

Output name	e-TrustEx instance hosted at the EC
Description	e-TrustEx can be reused in a service delivery mode within the EU Institutions. The following projects are reusing it: • e-PRIOR (DIGIT) • DECIDE (SG)

	• EDMA (DG COMP) • eJustice portal (DG JUST) • CEF eDelivery connector (DG CONNECT) • OPOCE (OP) • GENIS (DG COMP)
Reference	DIGIT-eTrustEx-Support@ec.europa.eu
Target release date / Status	Released

1.5.10 ORGANISATIONAL APPROACH

1.5.10.1 Expected stakeholders and their representatives

Stakeholders	Representatives
ISA[2] Committee/Coordination Group	The ISA[2] Committee and coordination group assists the Commission in translating priorities into actions and to ensure continuity and consistency in their implementation.
DIGIT – Directorate General for Informatics of the European Commission	**Unit DIGIT.B.4** (*Corporate financial, Procurement and Policy solutions*) This unit is the main service in charge of this action and responsible for the development coordination and maintenance of e-TrustEx. It ensures the development and re-use of the e-PRIOR related modules and services and coordinates the interaction between the different stakeholders. **Unit DIGIT.B.2** *(Corporate knowledge and Decision making solutions)* This unit is in charge of developing the e-TrustEx GUI, adapter and of the DECIDE project.
Secretariat general Of the European Commission	**Unit SG.A1** *(Advice, developments and logistics)* This unit is the system owner and business project manager of DECIDE and represents the interests of the DECIDE users.
DG CONNECT – Directorate General for Communication Networks, Content and Technology of the European Commission	**Unit CONNECT.H3** *(ICT for Government and Public Services)* The cooperation with CONNECT is key given its role as the primary link between CIP pilots, the provision of building blocks through the CEF programme and the Commission.
DG COMP - Directorate General Competition of the European Commission	**Unit COMP.R.3.** *(Information Technology)* This unit is in charge of the EDMA project and will be responsible of the development of the EDMA and GENIS specifically related modules. **Unit COMP.R1** *(Document Management)*

	This unit is the system owner and business project manager of EDMA and represents the interests of the EDMA users. **COMP.H** *(State aid: Cohesion, R&D&I and enforcement)* This Directorate is the system owner of the GENIS project.
Organisations in Member States	Members States representatives of administrations either working on similar initiatives or interested in adopting eTrustEx.
Other DGs of the European Commission (as required)	Representatives of other DGs / EU Institutions either working on similar initiatives or interested in adopting eTrustEx.

1.5.10.2 Communication plan

| Event	Representatives	Frequency of meetings / absolute dates of meetings?
ISA^2 group – successor of the TIE Working Group	eTrustEx team members, Member States representatives, ISA unit members, ISA^2 Coordination Group	Quarterly
Project Coordination Group	Team leaders and HoUs of development teams of eTrustEx	Monthly
Extended Coordination Group	Team leaders and HoUs of development teams of eTrustEx and system owners (business stakeholders) of the involved pilots	Only when issues cannot be solved in the Project Co-ordination Group.
Bilateral meetings with Member States	DIGIT representatives, Member States representatives	These meetings are arranged by DIGIT on ad hoc basis.
Bilateral meetings with Policy DGs	DIGIT representatives, Policy DGs representatives	These meetings are arranged by DIGIT on ad hoc basis.
Relevant conferences and events	DIGIT with any other project stakeholder	DIGIT is invited to participate in meetings organised by Member States, the LSPs, e-Practice, etc.
Joinup	DIGIT representatives	(online channel)

1.5.10.3 Governance approach

First and foremost, the e-TrustEx project is an action of the ISA^2 programme and therefore, it follows the ISA^2 governance structure.

To achieve the aforementioned objectives, this project will collaborate with several DGs of the European Commission and with several other stakeholders (e.g. participants of CIP pilots, Member States).

The Project Coordination Group ensures coordination and involvement of each of the associated services. The coordination with the system owners of the systems connected to e-TrustEx is assured by their system providers. Decisions and other important information are communicated to all involved entities through the Project Coordination Group. In addition to the scheduled meetings, these groups meet when necessary and they should be versatile and empowering with minimal bureaucracy.

Based on the actual needs and to better bridge the technical and the business aspects, an Extended Coordination Group could be set-up to also involve the "business" stakeholders (system owners) of the back-end systems. The system owners would represent the interests of the final users of the exchange platform that are external to the Commission. Meetings of the Extended Co-ordination Group would take place exceptionally: only when issues cannot be solved in the Project Co-ordination Group.
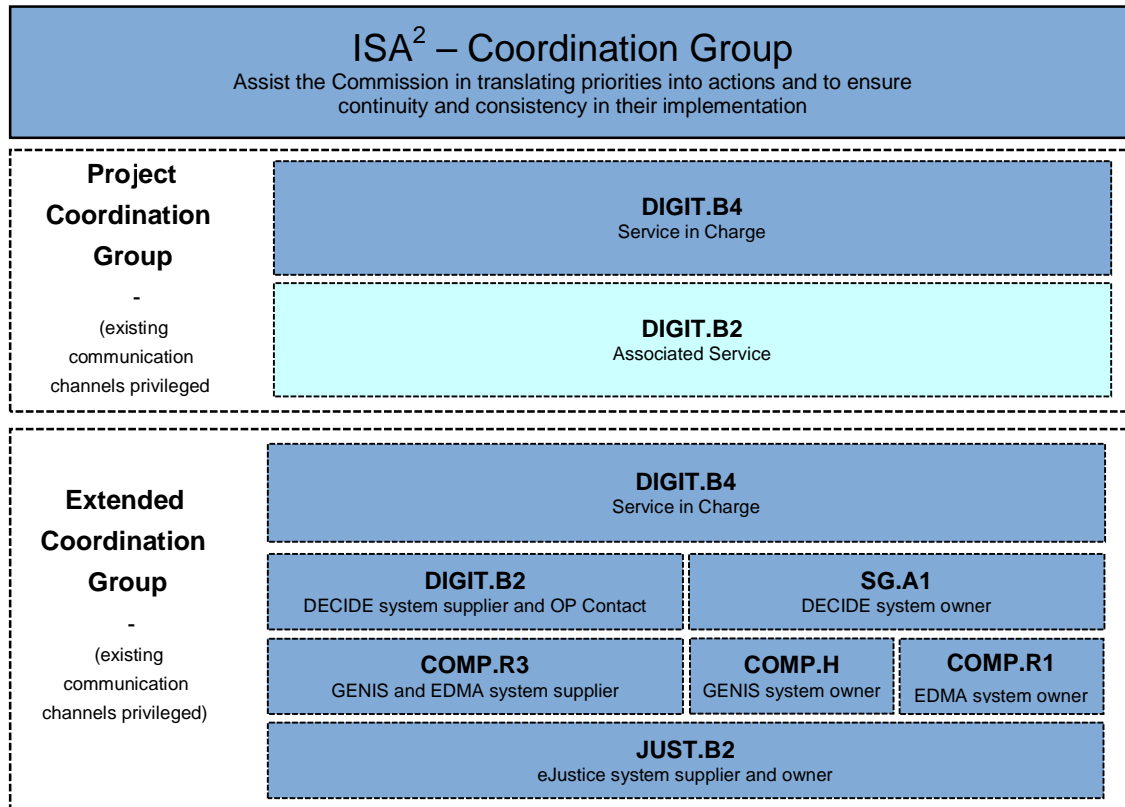
1.5.11   TECHNICAL APPROACH

This action is not a new initiative, but rather execution and operation building on already ongoing work funded under the ISA Work Programme. The platform has, as part of the earlier ISA Work Programmes implemented several phases of architecture roadmap enhancement, making the platform

scalable, reliable and supporting additional functionalities. During the last ISA Work Programme a number of pilots in cross-border information exchange have been implemented in several sectors using the same e-TrustEx platform.

The project will now focus on leveraging on the experiences collected during the work that has been done. This includes implementing essential needs identified by users and keeping the services operational. The various activities of the project are executed in three sub-phases:

- Execution; and
- Operational; along with a parallel
- Monitoring and control phase.

The activities involved in each execution sub-phase will contribute towards the development of further functionality in order to support the objectives of the phase, whereas the activities for the operational parts will contribute towards providing the necessary support and roll-out, and cooperation with MS and policy DGs in order to facilitate their adoption of the tool. In order to encourage the stakeholders to move from awareness to action, DIGIT.B4 will define and execute an adoption plan, leveraging its own experiences to facilitate user adoption and provide advice to public administrations.

The outputs and results of the execution sub-phase will be available in the following phases:

Phase 1
Main focus: Additional functionalities and improvements
Details: The activities of this phase are contained in 6 Work Packages (WPs):

	Scope	Identified objectives
WP1	Integration with other services	▪ Integrate to evidence handling of CEF eDelivery ▪ Start work on integrating eTrustEx adapter with archiving/cleaning service (with retention policy) of the Node ▪ Start work on integrating with smart card readers for signing ▪ Complete work on integration with the document repository services of ISA action 2.9.
WP2	Adapt to evolution of browsers	▪ Start work on redevelopment of the e-TrustEx web applet using HTML5
WP3	Support of new protocols	▪ Implement support for additional protocols (such as FTP) ▪ Implement interoperable queue protocol ▪ Implement new interface with improved genericity (SBDH)
WP4	Configuration and notification	▪ Implement centralised configuration mechanism ▪ Implement notification mechanism
WP5	Mobile access	▪ Start work to make an e-TrustEx user interface version which offers the best experience to mobile users
WP6	eIDAS compliance	▪ eIDAS impact assessment

Phase 2

Main focus: Mobile access and compliance with legislation

Details: The activities of this phase are contained in 6 Work Packages (WPs):

	Scope	Identified objectives
WP1	Integration with other services	▣ Complete work on integrating eTrustEx adapter with archiving/cleaning service (with retention policy) of the Node ▣ Complete work on integrating with the CCN network (tbc)[5] ▣ Complete work on integrating with smart card readers for signing
WP2	Adapt to evolution of browsers	▣ Complete work on redevelopment of the e-TrustEx web applet using HTML5
WP3	Improvement of logging and monitoring features	▣ Improved decisional logs (data warehousing, reporting) ▣ Improved monitoring (active monitoring, alerts)
WP4	Improved deployment	▣ Facilitate deployment of eTrustEx (docker) ▣ Make eTrustEx compatible with cloud computing
WP5	Mobile access	▣ Complete work to make an e-TrustEx user interface version which offers the best experience to mobile users
WP6	eIDAS compliance	▣ Implementation of actions identified by eIDAS impact assessment

Methodology:

The project teams use the RUP@EC methodology for software development, PM2 for project management and ITIL for service management.

The key point of the chosen approach consists in:

1. incremental development which progressively makes available the support of complex interactions and exchange of additional business documents;

2. re-use of best practices and existing implementation as well as the reference to existing standards that have been developed already.

1.5.12 COSTS AND MILESTONES

1.5.12.1 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)
Phase 1 –	Additional functionalities	950	ISA[2]	Q2/2016	Q1/2017

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[5] No budget implication, this integration will be funded by DG TAXUD

Execution	and improvements					
Phase 1 – Operational	Operation phase 1	250	ISA^2	Q2/2016	Q1/2017	
Phase 2 – Execution	Mobile access and compliance with legislation	950	ISA^2	Q2/2017	Q1/2018	
Phase 2 - Operational	Operation phase 2	250	ISA^2	Q2/2017	Q1/2018	
	Total	**2400**				

1.5.12.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016	Phase 1 – Execution	950	
	Phase 1 – Operational	250	
2017	Phase 2 – Execution	950	
	Phase 2 – Operational	250	

1.5.13   ANNEX AND REFERENCES

Description	Reference link	Attached document
Digital Agenda	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:PDF	
Digital Single Market	http://ec.europa.eu/priorities/digital-single-market/docs/dsm-communication_en.pdf	
CEF	https://ec.europa.eu/digital-agenda/en/connecting-europe-facility	
eIDAS regulation	http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.257.01.0073.01.ENG	