



ISA WORK PROGRAMME

SECOND REVISION 2012

ANNEX TO SECTION I

PART 1

Detailed description of actions

JOINING UP GOVERNMENTS



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0. INTRODUCTION

This part of the Annex contains, for each of the actions mentioned in the ISA work programme, a more detailed description, giving all elements requested in Article 9, paragraph 4 of the ISA decision (Decision N°922/2009/EC).

1. TRUSTED INFORMATION EXCHANGE

1.1 PROMOTING SEMANTIC INTEROPERABILITY AMONGST THE EUROPEAN UNION MEMBER STATES

Formerly named "Methodologies for the development of semantic assets"

1.1.1 CONTEXT

1.1.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common services
Service in charge	DG DIGIT
Associated Services	

1.1.2 OBJECTIVES

The objective of this action is to promote semantic interoperability amongst the EU Member States (MSs).

This is achieved by:

- Collecting, organizing, maintaining and providing access to a repository of highly reusable semantic interoperability assets as well as promoting best practices, experiences and lessons-learned in the area of semantic interoperability.
- Providing the infrastructure via the Joinup platform for accessing, sharing and reusing semantic interoperability assets and open source software (OSS) that may be hosted in national repositories.
- Increasing the awareness on the importance of semantic interoperability and appropriate metadata management policies.

1.1.3 SCOPE

This action covers activities within the ISA programme in relation to semantic interoperability, which has been highlighted as one of the priority areas in the European Interoperability Strategy (EIS). These semantic interoperability activities cover both cross border and cross sector domains.

The relevant services are currently provided by the SEMIC.EU platform which makes available the necessary support infrastructure for the sharing and re-use of semantic assets and brings administrations together to collaborate.

The technical development of the new integrated platform (Joinup) including the implementation of the federation of semantic assets and OSS and generic animation activities are not considered within the scope of this action, as these will be covered via the Joinup Platform (Action 4.2.1) and the "Community building and effective use of the collaborative platform" (Action 4.2.2) actions in the work programme.

There is a clear link between this Action and the Action for the European Federated Interoperability Repository (EFIR). This later action intends to develop a federated repository of interoperability (IOP) assets. It will build on and elaborate on work conducted already in Action 1.1, and will also integrate the EFIR in the Joinup platform.

1.1.4 PROBLEM/OPPORTUNITY STATEMENT

The environment in which data exchange takes place amongst MSs is very complex contributing many barriers and challenges to the exchange of data during the execution of European Public Services. These barriers include divergent interpretations of the data, lack of commonly agreed and widely used data models, absence of universal reference data (e.g. code lists, taxonomies), the multilingual challenge, etc. Due to these pressures, semantic interoperability becomes an important element in many eGovernment and interoperability national agendas and interesting experience and lessons-learned can already be shared at a European level.

The Action tries to overcome semantic interoperability problems by:

- documenting what is available in each MS with regards to metadata policies and the management of semantic interoperability assets;
- identifying opportunities for alignment;
- promoting share and reuse of semantic assets, experiences and tools and facilitating agreements in key areas;

Raising awareness on the importance of metadata management. Moreover, the Action develops and promotes common specifications for enabling federation of repositories storing semantic assets and OSS.

Through this action, the ISA programme sets to achieve a better collaboration between European public administrations towards agreements on the meaning of the exchanged information. The new integrated platform (Joinup) should provide the necessary infrastructure for this collaboration.

1.1.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	<ul style="list-style-type: none"> ○ Access to a European repository of reusable semantic interoperability assets (via the Joinup platform), which will result in improving reuse and enhancing interoperability amongst MSs ○ Possibility to promote their own semantic interoperability assets ○ Forum to identify opportunities for harmonization at European level ○ A virtual place to share best practices and experiences
IT Services Industry	<ul style="list-style-type: none"> ○ Access to a European repository of reusable interoperability assets ○ Reduced development costs: <ul style="list-style-type: none"> • due to reuse during the initial development phase • due to less interoperability conflicts while integrating systems or providing cross-agency/domain/country services ○
European Commission Services	<ul style="list-style-type: none"> ○ A platform for storing semantic assets used by DG Informatics while developing applications and information systems for the European Commission ○ A platform and central point of reference for collecting, organizing, storing and making available semantic interoperability assets which have been created by various EU entities ○ An infrastructure that allows the MSs and the Commission services to identify conflicts, overlaps, duplication of work and possibilities for alignment amongst and European Commission and the MSs

1.1.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
Digital Agenda	<ul style="list-style-type: none"> ○ MSs are suggested in part 2.7.4 to “Make eGovernment services fully interoperable, overcoming organisational, technical, or semantic barriers ...”. The Action tries to address the semantic barriers mentioned here. ○ The Action can contribute towards Key Action 14: Propose a recommendation defining a minimum common set of patient data for interoperability of patient records to be accessed or exchanged electronically across MSs by 2012. This effort could be based on the work in the Core Person specification.
eGovernment	<ul style="list-style-type: none"> ○ 2.2.3 of the Action Plan: “The Commission will conduct a study with the MSs, of the demand for cross-border services and

Action / Policy	Description of relation
Action plan	<p><i>assess the organisational, legal, technical and semantic barriers.</i>" The latest barriers lie at the core of the Action's goal.</p> <ul style="list-style-type: none"> ○ 2.4.1 of the Action Plan semantic interoperability is mentioned "...as an essential precondition for open, flexible delivery of eGovernment services". The Action contributes to this end.
Standardisation activities and organisations	<p>The work foreseen in this Action, especially the part relevant to the identification of alignment opportunities may relate to standardization activities. Although the goal and scope of the Action are limited to influence the National Interoperability Frameworks and to recommend common specifications to the MSs, standardization organizations could assess the possibility of advancing the agreed specifications towards a formal standardization process.</p> <p>Moreover, close links with standardization organizations guarantee that duplication of work is avoided, while existing standards are taken into account and promoted for reuse.</p>
Large Scale CIP Pilots, and EU-funded initiatives to create semantic assets	<p>There are several EU-funded initiatives that have created and are creating important semantic assets. The Action intends to identify and promote these assets. Examples include the INSPIRE directive¹, Eurovoc², the European Training Thesaurus³, and Large Scale CIP Pilots (e.g. SPOCS, STORK, PEPPOL)</p>

1.1.7 ORGANISATIONAL APPROACH

1.1.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	<ul style="list-style-type: none"> ○ ISA Committee ○ ISA Coordination Group ○ Trusted Information Exchange ISA Working Group ○ Persons/units in charge of National Interoperability Frameworks and/or metadata standards catalogues/repositories, etc
Standardization bodies	<ul style="list-style-type: none"> ○ W3C ○ CEN ○ UN/CEFACT

¹ <http://inspire.jrc.ec.europa.eu/>

² <http://eurovoc.europa.eu/>

³ <http://libserver.cedefop.europa.eu/ett/en/>

Stakeholders	Representatives
	<ul style="list-style-type: none"> ○ ETSI ○ Dublin Core Metadata Initiative
DG Informatics (DIGIT)	Unit(s) responsible for metadata management
Other EC DGs	Representatives from DGs to identify important semantic assets for reuse

1.1.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
The Action tries to disseminate its work with presentations, posters and panels in the major eGovernment and semantic technologies conferences and events		
The Action will try to raise awareness for the importance of metadata management and alignment in MSs and internally in the EC		

1.1.7.3 Governance approach

The Action is run by the European Commission, DG DIGT, B.2 (ISA Unit).

For the work expected in this Action, collaboration with MSs and other stakeholders (e.g. other DGs, standardization bodies) is considered of critical importance. For this reason, communication with the MSs and third parties will be frequent and their active involvement will be encouraged via invitations for participation in ad hoc groups discussing specialised issues related to the content of the Action. The ISA Trusted Information Exchange Working Group will be the main point of contact and reference for the work foreseen in the Action.

1.1.8 TECHNICAL APPROACH

In 2011, an assessment of the Action results under the IDABC programme took place. Based on this evaluation, recommendations were provided. Following these recommendations, the Action will continue its successful operation as clearinghouse and access point to a rich collection of

reusable assets for public administrations. Efforts for identifying and registering assets will continue, with clear emphasis on mature and tested assets that are ready for reuse and have cross-boarder relevance. Moreover, the Action will focus on providing results in the following areas:

a) Strategic/policy dimension

i) Raising MSs awareness on the importance of establishing metadata management policies. Relevant good practices amongst MSs will be identified and shared. A metadata management maturity model will be used to help MSs become aware of what needs to be done to further advance their metadata management policies and systems.

ii) Establishing a forum where national semantic interoperability policies and strategies could be identified, and discussed to discover commonalities, conflicts and opportunities for alignment.

b) Vertical dimension (*alignment*): The Action will draft - through a collaborative process, host, and maintain a small set of commonly agreed, generic metadata schemata (core vocabularies) to be promoted for direct adoption in NIFs and/or national metadata frameworks/architectures/ policies. The Action intends to develop the first 3-5 vocabularies and promote endorsement by MSs in 2012.

c) Horizontal dimension (*coverage*): The Action will design the infrastructure for a federated portal for eGovernment metadata schemata and an enhanced federation of OSS. The new Joinup platform will play the role of a semantic asset and OSS portal where the users will be able to look for assets and OSS residing not only locally in the Joinup repository but also in other repositories hosted by MSs and third parties. Technically, this will be achieved through the definition, adoption and use of the Asset Description Metadata Schema (ADMS) and the relevant metadata schema for OSS. ADMS is expected to be the first core vocabulary to be discussed and endorsed by MSs. Access to the first ADMS-based federated national repositories will become available via the Joinup platform in 2012.

1.1.9 COSTS AND MILESTONES

1.1.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Provision of the online services via the SEMIC.eu platform	800	ISA	Q3/2010	Q3/2011

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	including the clearing process, coaching and support activities, collaboration activities as well as all relevant news.				
Inception	Project Charter, Revision of the SEMIC.eu Roadmap document, to reflect the period 2010 - 2015, highlighting concrete activities for the achievement of this action.	150	ISA	Q3/2010	Q4/2010
Execution	Revision of the Licensing Framework, Quality Framework, Clearing Process Definition to reflect the changes in the SEMIC.eu roadmap and the scope and objectives of this action.	250	ISA	Q4/2010	Q2/2011
Operational	Development, promotion, use of Core Vocabularies	550	ISA	Q3/2011	Q4/2012
Operational	Specifications for the Federation of Semantic Assets Repositories	150	ISA	Q3/2011	Q4/2012
Operational	Specifications for the Federation of OSS Repositories	150	ISA	Q3/2011	Q4/2012
Operational	Identification and registration of new semantic assets, collaboration activities for cross border asset development and sharing, and showcasing real semantic interoperability examples.	500	ISA	Q3/2011	Q4/2012

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	Maintenance of the online services via the Joinup platform including the clearing process, support activities, collaboration activities, publishing relevant news and community animation.				
Operational	<p>Continuation of Core Vocabularies work, enhancement of the federation of the semantic assets and OSS repositories, identification and registration of new semantic assets, documentation and promotion of EC semantic assets, identification of conflicts, overlaps and alignment opportunities collaboration activities for cross border asset development and sharing, showcasing real semantic interoperability examples.</p> <p>Maintenance of the online services via the Joinup platform including the clearing process, support activities, collaboration activities as well as all relevant news.</p>	3000	ISA	Q1/2013	Q4/2015
	Total	5.550			

1.1.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Operational	300	300
2010	Inception	150	150
2010	Execution	100	100
2011	Execution	150	150
2011	Operational	850	850
2012	Operational	1.000	
2013	Operational	1.000	
2014	Operational	1.000	
2015	Operational	1.000	

1.1.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
Federation of Semantic Assets Repositories	http://www.semic.eu/semic/view/documents/federati-on-of-repositories.pdf	
eGovernment Core Vocabularies	http://www.semic.eu/semic/view/documents/egov-core-vocabularies.pdf	
Towards Open Government Metadata	http://www.semic.eu/semic/view/documents/towards_open_government_metadata.pdf	

1.2 ACCESS TO BASE REGISTRIES

1.2.1 CONTEXT

1.2.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	DG DIGIT
Associated Services	DG MARKT

1.2.2 OBJECTIVES

As stated in ISA legal basis in:

- Article 3: "Activities
The ISA programme shall support and promote: the establishment and improvement of common frameworks in support of cross-border and cross-sectoral interoperability; ..."
- Article 7:
"Solutions
1. Common frameworks shall be established and maintained by means of studies...."
The objective of this action is to enable the opening up of base registries by defining a common framework to make it happen.

The proposed action is to carry out a study as a first investigation at national level in order to:

- assess the state of play in the Member States and their readiness to have a common action at EU level in this area;
- help defining the needs and expectations of opening up base registries;
- identify associated risks and opportunities of opening up Member States registries across borders.

1.2.3 SCOPE

As the information needed for operating European Public Services is owned and managed at the Member State level (or within a Member State) within registries, the action should investigate whether and how the opening up of (base) registries - with the appropriate security and privacy measures- can help and foster European Public Service establishment .

The action has been identified within the Trusted Information Exchange cluster within the EIS.

1.2.4 PROBLEM/OPPORTUNITY STATEMENT

One of the most important components of European Public Services are the base registries that are reliable sources of basic information on items such as persons, companies, vehicles, licences, buildings, locations and roads. Such registries are under the legal control of and maintained by a given public administration.

It is assumed that cross-border co-operation between registries has the potential to reduce administrative burden for businesses and citizens and can support the creation of 'life event services' related to study, work, leisure and retirement in Europe.

Such an approach may require interfaces to these registries to be published and harmonised, at both the semantic and technical level.

One of the obstacles to the adoption of the conceptual model for European Public Services implementation might be the existence of legacy systems. Such legacy systems, and their underlying data repositories, have specific characteristics limiting the possibilities for reuse (e.g. lack of published interfaces) and they might require extensive re-engineering efforts in order to make the information available for European Public Services.

The action will study the need and requirements for a framework enabling access to authentic data sources.

1.2.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations	More efficient and effective access to information across borders when establishing European Public Services
European Commission Services	Quicker and easier European Public Service establishment
Citizens and enterprises	Reduction of administrative burden

1.2.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
Directive 2007/2/EC	Covers interchange of spatial information
Directive 2003/98/EC	Covers the re-use of public sector information
The interconnection of business registers	Covers business registers

Action / Policy	Description of relation
e-Justice - Interconnection of national registers	Covers insolvency registers, land registers, commercial registers and registers of wills
Directive 95/46/EC	Covers the protection of individuals with regard to the processing of personal data and on the free movement of such data

1.2.7 ORGANISATIONAL APPROACH

1.2.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
European Commission Services	Project managers
Member States' public administrations	Project managers

1.2.8 TECHNICAL APPROACH

As the notion of subsidiary is important in this focus area, the role of the Commission is to coordinate efforts and to steer a possible common approach.

The study will first investigate what is already done in this area at the various levels of Government and in various sectors. Building on successful practices, the action may propose a common approach of opening up base registries at EU scale, evaluating the need for the definition of common interfaces to access base registries. The study shall also investigate security and privacy aspects of opening up the base registries.

The study will be performed in two phases: an initial phase and a main phase.

Initial phase

The study will first investigate what is already done in this area at the various levels of Government and in various sectors. In this phase the following will be proposed:

- a first version of a definition of base registries;
- an extensive list of Registries that may be included into the study, based on i.a. EU legislation, PCIs performed under IDA and IDABC, projects financed under eTEN and CIP ICT-PSP, cases submitted to ePractice, etc.);

- an initial analysis on the use of base registries (or similar approaches to structured information exchange) in EU legislation.

The initial phase will include a first version of the approach and scope, which needs to be agreed upon both with the Member States and with relevant Commission services. The approach also proposes a way to assess the situation regarding base registries in the Member States and on cross-border use of base registries. Based on that agreed first version of the approach, the work of the main phase can be initiated.

Main phase

The main phase includes the following activities:

- a refinement of the deliverables defined in the initial phase;
- an assessment of the situation regarding base registries in the Member States (in terms of coverage, architecture, legal basis, organisational situation, strategy);
- an assessment on cross-border use of base registries and access to data (beyond requirements that follow from EU legislation);
- an analysis of the bottlenecks, legal constraints, organisational, technical and semantic challenges.

Taking into account security and privacy aspects, and building on successful practices, the action may propose a common approach of opening up base registries at EU scale, evaluating the need for the definition of common interfaces to access base registries. For those Member States that have an advanced system in place, a guiding principle could be "what is possible domestically, should be possible cross-border", whereas for those MS that do not have a system in place, an approach may be proposed that allows them to create a strategy from scratch.

The main phase of the study concludes with an impact assessment in terms of costs and benefits for all relevant stakeholders of the proposed common approach, and recommendations on next steps to take.

The activities under this action will be performed with very close collaboration with the Member States and therefore they will be handled under the Trusted Information Exchange Working Group.

1.2.9 COSTS AND MILESTONES

1.2.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Study	Framework on access to authentic data sources	300	ISA	Q3/2010	Q2/2011

Study	Proposal for next steps	250	ISA	Q4/2011	Q3/2012
Inception	Common approach	200	ISA	Q3/2012	Q3/2013
	Total	750			

1.2.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		300	300
2011		250	
2012		200	
2013			
2014			
2015			

1.2.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

1.3 CATALOGUE OF SERVICES

1.3.1 CONTEXT

1.3.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	DG DIGIT
Associated Services	

1.3.2 OBJECTIVES

The objective of the action is to address the feasibility, the benefits and the obstacles of developing a European catalogue of such basic services. The proposed action is to carry out a study as a first investigation at national and European level.

This action and the above objectives are addressing the ISA programme, Decision No 922/2009/EC of the European Parliament and of the Council [2], in general and in specific article 3 (c) "... the establishment, industrialisation, operation and improvement of new common services, ..." and article 4 (b) "openness", (c) "reusability" and (e) "security".

1.3.3 SCOPE

As the information needed for operating a European Catalogue of basic services is owned and managed at the Member State level (or within a Member State), the action should investigate whether and how providing such catalogue service can help and foster European Public Service establishment. The action has been identified within the Trusted Information Exchange cluster within the EIS.

1.3.4 PROBLEM/OPPORTUNITY STATEMENT

As it is stated in the European Interoperability Framework, public administrations should develop a component-based service model, allowing the establishment of European public services by reusing, as much as possible, existing service components. At the lowest level of such European public service are the basic public service components from which European public services can

be built. These basic services group three types of such components, namely interoperability facilitators (facilitating e.g. the translation of information from one format/language to the other), services based on base registries, and external services (e.g. authentication services, payment services, etc).

It is assumed that the building of cross-border European public services based on the re-use of such basic services have the potential to reduce administrative burden for businesses and citizens and can support the creation of 'life event services' related to study, work, leisure and retirement in Europe. However, there are a number of obstacles limiting the cross-border use of these basic public services, both on the technical, semantic, organizational and legal level of interoperability. An additional obstacle is the lack of visibility in terms of a central catalogue of such public services on a European level. Information is also lacking in terms of service attributes, usage guidelines, multi-lingual support, and cross-border authorization.

As a result, member states currently neither have the up-to-date information with regards to available basic public services on a member state level, nor the means to efficiently and easily access these services, a necessity when providing cross-border services.

This action will provide information on the feasibility to establish such catalogue.

1.3.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	For relevant European national authorities or agencies: the ability to efficiently re-use information available in other member states. Easier provision of cross-border public services

1.3.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
DIRECTIVE 2003/98/EC on the re-use of public sector information (PSI directive)	The Directive on the re-use of public sector information deals with the way public sector bodies should enhance re-use of their information resources It sets minimum rules for the re-use of PSI throughout the European Union. The catalogue of services action - as public sector information is usually made available by means of IT services – is impacted by the rules set forward in the directive.

INSPIRE	Implementing the rules for spatial data services will likely to lead to additional services metadata which will be taken into account when developing the catalogue of services portal

1.3.7 ORGANISATIONAL APPROACH

Since currently there is only limited information both on the type and number of possible services which such catalogue could include and on the best approach for the technical implementation or the organisation of operation of the service, the study will be prepared in two phases. This approach will reduce the risk and ensure closer monitoring of the project.

Initial phase (Study)

- Clarify the "basic service" concept";
- Clarify the purpose of catalogue of basic services;
- Set the scope for services to be included (e.g. regional, national, European services? Which type? Government to government, government to business, government to citizens?);
- Collect best practices in the world both in the public and in the private sector;
- Provide first ideas on organization, semantic and technical aspects of a future catalogue.

The initial phase will include a first version of the approach and scope. Based on this agreed first version of the approach, the work of the main phase can be initiated.

Main phase (Study)

- Provision of theoretical background;
- Provision of a detailed description on existing situation with regards to catalogue services in the EU, around the world (elaboration of best practice);
- Proposal of a solution taking into account organizational, semantic and technical issues;
- Impact assessment of the proposed solution (in terms of coverage, architecture, legal basis, organisational situation).

1.3.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
European Commission Services	Project Managers
Member States' public administrations	Project Managers, ISA Working Group on Trusted Information Exchange

1.3.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?

1.3.7.3 Governance approach

The Action will be run by DIGIT with the support of a contractor. It will be run in close collaboration with the ISA Trusted Information Exchange Working Group and the concerned European Commission services. Numerous experts within Member State administrations and European Commission DGs will also be consulted.

1.3.8 TECHNICAL APPROACH

The feasibility study by Q4 2011 will result in a preliminary overview of the scope of what is needed in order to build a Catalogue of Services for cross-border services and whether such catalogue can be effectively operated and interconnected with national initiatives. It will identify the main issues and problems associated with it, as well as solutions on how to rectify them. In case of positive results, the next steps will result in a more detailed requirements analysis and further detailed specifications for the system.

These specifications will then be used in the software design of the system. An overall software architecture will be planned and the different modules needed will be specified. The proposed solution will then be implemented, tested and rolled out. The entire system will then need to be maintained and be designed in such a way as to be able to adapt to new, future requirements.

1.3.9 COSTS AND MILESTONES

1.3.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Study	Feasibility study	200	ISA	Q3/2010	Q4/2011

Study	Specifications and initial development	250	ISA	Q2/2012	Q1/2013
	Total	450			

1.3.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		200	200
2011		0	
2012		250	
2013			
2014			
2015			

1.3.10 ANNEX AND REFERENCES

Description	Reference link
Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:108:0001:0014:EN:PDF
DIRECTIVE 2003/98/EC on the re-use of public sector information (PSI directive)	http://ec.europa.eu/information_society/policy/psi/docs/pdfs/directive/psi_directive_en.pdf

1.4 ECAS-STORK INTEGRATION

1.4.1 Context

1.4.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DIGIT.A.3
Associated Services	DG INFSO, DG MARKT, DG JUST, DG CLIMA

1.4.2 OBJECTIVES

The objective of this action is to enable access to European Union information systems using the user's national e-ID solution with a minimum impact on the information systems themselves.

This would improve user-friendliness, by reducing the number of credentials a user has to rely on, and security, since the national e-ID solution normally relies on artefacts that are stronger than a login name and password.

1.4.3 SCOPE

1. Continuation of the service

The EU PEPS must keep up with the evolution of specifications and requirements. It must connect to additional member states or participant countries.

2. Support for mission critical applications

In a first phase, authentication by means of an eID will only be offered to a limited number of information systems at the European Commission. Some of them are mission critical and require a high degree of security and availability.

3. Generalisation

In a second phase, authentication by means of an eID will be enabled by default for all information systems relying on ECAS for authenticating users.

1.4.4 PROBLEM/OPPORTUNITY STATEMENT

In a first phase, DIGIT received IDABC funding for the realisation of a pilot interconnection between ECAS (European Commission Authentication Service) and STORK (Secure idenTity acrOss boRders linKed). The purpose was to demonstrate that ECAS is able to consume identities provided by STORK.

In a second phase, DIGIT received ISA funding for consolidating the implementation and transforming the proof-of-concept into an official STORK pilot. Users if CIRCABC have been offered the option authenticate by means of their eID for demonstration purposes. An alternate authentication mechanism was implemented for users who are not eligible to use STORK so that the population covered matches the one accessing European Commission information systems. The PEPS implemented at the European Commission was established as the official EU PEPS usable by all European institutions and bodies.

On January 1st 2012, a limited set of production applications at the European Commission will be accessible to users who authenticate by means of their national eID. This is a significant achievement that should be seen as a first step towards a generalisation to all European Commission information systems. It requires that the collaboration between DIGIT and countries providing eID solutions goes forward as eID interoperability grows mature. It implies that the EU PEPS and its integration with ECAS gain stability since granting access to sensitive information and valuable assets using and eID implies more constraints than operating a pilot phase where information systems rely on eID for demonstration purposes (even though it happens in a production environment). Applications that will authenticate users by means of their eID thanks to ECAS include IMI (Internal Market Information System – DG MARKT), EUCCR (EU Emission Trading Scheme Central Registry – DG CLIMA), the eFP7 Participant Portal (DG RTD) and the European e-Justice Portal (DG JUST).

1.4.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Institutions	<ul style="list-style-type: none"> ○ The European Commission demonstrates that it promotes the usage of European initiatives. ○ All ECAS-enabled information benefit from the integration with national eID solutions with a minimal impact (ideally no impact at all). ○ Confidence in the user identity is increased. ○ Development is simplified thanks to the use of a common mechanism for all information systems. ○ Authenticating using an eID is "cooler" than doing so with a login name and password. It improves the image and gives a touch of modernity.

Beneficiaries	Anticipated benefits
Member States' public administrations	<ul style="list-style-type: none"> ○ Consistency is increased since the same credentials are used to access both national information systems and European Commission information systems. ○ The level of security is automatically aligned with the one provided by the member state itself.

1.4.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
Digital Agenda	Allowing users to authenticate by means of their national eID in order to gain access to European Commission applications helps improve trust and security.

1.4.7 ORGANISATIONAL APPROACH

The effort will be carried by DIGIT.A.3 and will require close collaboration with ISA Action 1.5 that will manage the interoperability specifications under the responsibility of DG INFSO.

The ISA Trusted Information Exchange WG will be the interface for managing connections between the EU PEPS and the PEPS running in participating countries.

1.4.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
DIGIT	Adrian Dusa
DG INFSO	Kadamula Varghese
Member States	ISA Trusted Information Exchange WG

1.4.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Workshop	DIGIT, DG INFSO, Member States	Every 3 months

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Conference	ISA Trusted Information Exchange WG, DIGIT	Every 6 months

1.4.7.3 Governance approach

ISA Action 1.4 is responsible for writing specifications, defining Quality of Authentication Assurance levels and in managing the addition of new participating countries. The ISA Trusted Information Exchange WG liaises with DIGIT to provide the list of features the EU PEPS must support and the list of countries it must connect to.

1.4.8 TECHNICAL APPROACH

Identity and Access Management falls under the responsibility of DIGIT.A.3 and DIGIT.C.3. DIGIT.C.3 is responsible for the service aspects including support and operation of the solutions. DIGIT.A.3 is responsible for the engineering aspects including development and deployment of the solutions. Its scope covers the EU PEPS, the ECAS server, ECAS client agents that are integrated in all information systems relying on ECAS and provisioning processes that collect and consolidate identities.

Engineering tasks required in order to update the EU PEPS or to improve its integration with the ECAS server will be carried by DIGIT.A.3 using the governance and procedures in place to manage the lifecycle of ECAS. The team in charge of these activities will be integrated in the ECAS team to guarantee convergence, good communication and aligned quality standards.

1.4.9 COSTS AND MILESTONES

1.4.9.1 Breakdown of anticipated costs and related milestones

Phase:	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	Proof of concept (Execution report)	420	IDABC	Q3/2009	Q2/2010
Inception	Participation to the STORK pilot	60	ISA	Q3/2010	Q4/2010

Phase:	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	(project charter)				
Execution	Participation to the STORK pilot (execution report)	250	ISA	Q1/2011	Q2/2011
Operational	Participation to the STORK pilot	220	ISA	Q3/2010	Q3/2011
Inception	Consolidation (project charter)	60	ISA	Q4/2010	Q1/2011
Execution	Consolidation (execution report)	450	ISA	Q2/2011	Q3/2011
Inception	Expansion	120	ISA	Q3/2010	Q3/2011
Execution	Continuation of the service	300	ISA	Q1/2012	Q4/2013
Execution	Support for mission critical applications	150	ISA	Q1/2012	Q4/2012
Execution	Generalisation	150	ISA	Q1/2013	Q4/2013
	Total	2180			

1.4.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Inception	460	479
2011	Execution	700	700
2012	Execution	300	
2013	Execution	300	
2014			
2015			

1.4.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
ECAS-STORK Integration (pilot 6)	https://www.eid-stork.eu/pilots/pilot6.htm	

1.5 STORK SUSTAINABILITY

1.5.1 CONTEXT

Type of Action	Project
Type of Activity	Resuable generic tools
Service in charge	DG INFSO
Associated Services	DG DIGIT

1.5.2 OBJECTIVES

The STORK Large Scale Pilot is a 36 month long project under CIP ICT PSP. It started June 1st 2008 and has its end date as project on May 31st 2011. The project has developed an eID management system that allows European citizens to use their national eID as authentication means when logging in to public services in other countries. The technical feasibility of the system has been established during a 12 months operation phase ending on 31st May 2011.

There is considerable interest among the participating countries to keep the STORK platform operational beyond May 2011. The cross border interoperability is obtained using communication protocols, profiles and software components developed and agreed among the project partners. Continuity of eID operability beyond the official project end date requires maintenance and governance of these "soft components".

An initial study will provide recommendations and steps necessary for further and wider eIDM implementation that will support co-operation between European public administrations, by facilitating the efficient and effective electronic cross border and cross sectorial interaction between such administrations. It will also assist those bodies or agencies performing public functions on behalf of the public administrations, thus enabling the delivery of electronic public services supporting the implementation of Community policies and activities.

The study will focus on aspects not addressed, but equally important for sustainability of STORK, which are legal and organisational barriers of implementing STORK widely. It should be supported with analysis of significant business cases/applications.

From 2011 this action will update and maintain the Common Specifications (CS) and the QAA (Quality Authentication Assurance) model developed in STORK. It will upgrade and maintain software modules supporting common functionalities of the cross-border infrastructure as well as architectural issues.

1.5.3 SCOPE

This action will significantly contribute to facilitating the European interoperability strategy, for trusted and secure information exchanges and transactions for cross border and cross sectorial

public services. In this respect, the action will build on the results and lessons learned from the STORK project.

The project encompasses 17 European nations as project partners. The three year project comprises a 12 months period where eID credentials of the participating countries are tested in cross border situations. More info at <http://www.eid-stork.eu/>.

The functional and technical specification for a mutually agreed solution was agreed among the project partners by the end of 2009. A first reference implementation is in its test phase and will be used as platform for extensive pilot testing from June 2010.

This action aims to guarantee the technical sustainability of the STORK platform. Furthermore the work done by STORK will be supplemented with an analysis of legal and organisational issues that may represent barriers to the sustainability of the STORK platform. This will allow the participating eGovernment services and pilot applications to continue their operation. It will assure the continued operation and potential extension to additional countries and services. The network characteristics of the STORK infrastructure implies that the benefits for each member increases more than linear with the adoption of new participants.

1.5.4 PROBLEM/OPPORTUNITY STATEMENT

STORK has a robust decentralised architecture based on local technology nodes (PEPS) in the participating countries. There is no central technological hub. The PEPS communicate among themselves using the Internet as communication carrier. This is made possible based on an agreement on the use of certain protocols and standards.

A major issue will be the continuation of the governance so far done within the project consortium in relation to reference software, technical specifications and agreed "standards". An example is the QAA reference model – a reference model for authentication assurance quality - agreed among the STORK partners.

The many different national eID technologies participating in STORK are all referred to the STORK QAA model. If the STORK solution is to be extended to additional Member States and upcoming eID technologies, the QAA model and other critical elements of the architecture will need maintenance and adoptions.

This action will allow the use of subsidiary Commission instruments, e.g. Member State Experts Groups, to be used under Member State governance to take on the role until now filled by the project itself. It will allow for a smooth transition from pilot governance to a sustainable situation where essential elements of the STORK architecture has been taken over by relevant standardisation bodies and technology components have been adopted by the industry. The initial study will represent a valuable opportunity to strengthen the STORK team's own competence and resources with a targeted effort addressing issues identified mid term in the project.

1.5.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States	<p>Member States will have access to a suite of tested Common Specifications for eID agreed to by a majority of the EU Member States. Specifications and support will be available to all Member States – also those who did not participate in STORK.</p> <p>An operational European eID infrastructure based on open technology at state-of-the-art level and encompassing more than 50 percent of the Member States will be available for exploitation and potential hook up of new applications.</p> <p>The immaterial as well as the material infrastructure thus available to the Member States will be a strategic contribution to the fulfilment of the ambitions of the Digital Agenda for Europe and the Malmö Ministerial Declaration.</p>
Private Sector (inc. SMEs)	<p>The private sector will get access to an open suit of eID specifications. This will be particularly important for European SMEs.</p> <p>It is further expected that STORK Common Specifications and evolving standards will raise considerable interest by key industry players in the eID sector due to the widespread participation by national administrations in the STORK Large Scale Pilot.</p>

1.5.6 ORGANISATIONAL AND TECHNICAL APPROACH

The action will be responsible for the coordination of work related to the update of the Common specifications (CS) and the QAA (Quality Authentication Assurance) model defined in STORK. The action will be in command of the upgrade and maintenance of reference SW modules that support the common functionalities of the cross-border infrastructure and interoperability.

This will assure that Member States can reuse existing STORK modules and upgrade national eID infrastructure in accordance with evolution where it may take place. Interoperability specifications and reference implementations will be preserved over the time to the benefit of national eID systems which may remain fully compliant with interoperability requirements.

The work consists of various parts according to their nature:

0. Initial study

This study will work closely with other relevant studies, for example that proposed ISA action for ECAS/STORK initiated by DIGIT A3, the proposed ISA action for PEPPOL sustainability, and ICT-PSP large scale pilots (STORK, PEPOL, ePSOS, SPOCS), to ensure that duplication will be avoided, while maximising complementarity. INFOSO H2, responsible for three of these pilots will be responsible for managing the study, and therefore will ensure appropriate co-ordination.

1. Governance activities

1.1 Update of the QAA levels according to the following task breakdown:

- Once a year to discuss, vote on and formally agree on changes.
- Twice a year collect by e-mail change requests.
- Twice a year the dissemination of an assessment of requested changes.
- Once a year a publication of an updated "QAA" document.

1.2 Update of Common Specifications (CS):

- Initiate and coordinate discussions on new data or data to be changed as well as new functionalities or actual ones to be changed;
- Reflect agreed changes in documentation;
- Investigate data standards and promote their implementation;
- Promote the acceptance of the CS in appropriate forums (eGOV events, standardization organizations, Industry players...);
- Quality control on the implementation of changed specs;
- Standardisation works of the CS with relevant standardisation organisations;
- Quality assessment for implementation with new/changed Service Providers and new Member States;
- Coordinate implementation in Member States;
- Coordinate support groups;
- Support (encyclopaedia) to Member States;
- Active collaboration with EU sponsored projects and other sectoral eGOV solutions across-Europe; propose changes to the common specs which are required or useful to those projects.

2. Development works:

Maintenance, update and upgrade of the Common SW modules.

- Implement agreed changes in the common software, as well for PEPS as for V-IDP;
- Test changes in all relevant environments (Tomcat, JBoss, Glassfish; all on Windows / Linux) and others according to MS needs;
- Test compatibility with actual production versions;
- Maintenance of test-laboratory;
- Publish the new software, together with release notes;
- Active bug-tracking and error solution;

- Technical support for the Member States 8x5x52.

After two years the results of the project will be evaluated.

The activities under this action will be performed with very close collaboration with the Member States and therefore they will be handled under the Trusted Information Working Group.

1.5.7 COSTS AND MILESTONES

1.5.7.1 Breakdown of anticipated costs and related milestones

Phase:	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Project Charter	100	ISA	Q4/2010	Q2/2011
Execution	Update of the QAA model	30	ISA	Q2/2011	Q2/2013
Execution	Update of the Common Specification	360	ISA	Q2/2011	Q2/2013
Execution	Upgrade and maintenance of the Software modules	440	ISA	Q2/2011	Q2/2013
Execution	Evaluation	60	ISA	Q4/2012	Q2/2013
	Total (ISA)	990			

1.5.7.2 Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	100	99
2011	390	
2012	500	
2013		
2014		
2015		

1.6 COMMON INFRASTRUCTURE FOR PUBLIC ADMINISTRATIONS SUSTAINABILITY

Including PEPPOL — formerly named "PEPPOL Sustainability".

1.6.1 Context

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DIGIT
Associated Services	DG MARKT – DG INFSO – DG ENTR

Between 2007 and 2011, the European Commission has funded several Large Scale Pilots (LSPs)⁴ on cross-border services within the strategic priorities of the CIP (Competitiveness and Innovation Framework Programme). Their duration is typically 36 months with a pilot service operating for 12 months. As a number of these LSPs will end in 2012, the European Commission is analysing how to ensure their sustainability. As stated in the *Digital Agenda for Europe*, the ISA programme is an instrument that can be used for this purpose.

In 2011, two sustainability actions were part of the ISA Work Programme, one related to PEPPOL and another one to STORK. This action proposes to sustain PEPPOL's e-Delivery building block in anticipation of an agreement among the LSPs to converge their e-Delivery building blocks. The common e-Delivery solution will become the backbone of a Common Infrastructure for Public Administrations (hereafter referred to as CIPA). The concentration of the LSPs sustainability in a few actions will avoid the proliferation of non-coordinated approaches and costs.

This action aims to embrace commonality, compatibility, interoperability and rationalisation of the e-Delivery Building Blocks of the LSPs⁵. CIPA would be run by DIGIT until 2015 within the ISA work-programme. It should be noted that, if the European Commission creates a funding mechanism to ensure the long-term sustainability of the LSPs, ISA's involvement may cease at an earlier date.

⁴ such as PEPPOL, STORK, SPOCS, EPSOS and e-Codex

⁵ The creation of an open, scalable, flexible and secure infrastructure for public administrations to exchange information is not a new idea: in the past, IDA has aimed at this direction. Whereas IDA's solution to facilitate interaction between public administrations was based on a private network (TESTA), CIPA will be based on a set of technical specifications to enable secure e-Delivery of information over the internet. The next step should be to create CIPA by the combination of existing horizontal building blocks, sometimes referred to as key enablers, in a sound and integrated infrastructure. This should be achieved in collaboration with DG INFSO and other policy DGs of the European Commission.

1.6.2 OBJECTIVES

Europe is fragmented not only by multiple technical specifications at national level but also by the lack of common technical specifications at Pan-European level. In the last months, it has become apparent that the creation of purpose-built e-Delivery technical specifications⁶ by each LSP could potentially magnify this issue⁷. Consequently, the European Commission has requested e-Codex, PEPPOL and SPOCs to converge their purpose-built e-Delivery building blocks to a single one which can be re-used in any sector. This has led DG INFSO and DIGIT to rethink this action; DIGIT should primarily sustain the common e-Delivery building block of the LSPs because of its high reusability across borders and sectors. This building block will potentially become the backbone of a Common Infrastructure for Public Administrations (hereafter referred to as CIPA). The non-territoriality nature of cross-border eGovernment services argues in favour of EU level action to ensure the availability of key building blocks such as e-Delivery. If the Commission does nothing public online services can be expected to:

- Not be interoperable across-sectors;
- Fragmented and lacking critical mass to be widely used by Public Administrations and also by Business and Citizens;
- Costly to implement because of the duplication of efforts (each LSP will continue to set up its own e-Delivery building block).

As PEPPOL will end on April 30th, the proposed⁸ objectives of this action are:

1st: Keep PEPPOL's e-Delivery building block alive (as it is) until its migration to the common e-Delivery technical specifications of CIPA.

2nd: Ensure that PEPPOL's e-Delivery building block runs efficiently and effectively.

3rd: Ensure that PEPPOL's e-Delivery building block is migrated to the common e-Delivery technical specifications which will be agreed among all LSPs.

This action will also contribute to the implementation of the "common vision for a European Interoperability Architecture", ISA action 2.1. Aside from the development work, DIGIT will also involve DG ENTR to ensure alignment with the standardisation policy of the European Commission.

1.6.3 SCOPE

This action is a multidimensional project where strategy, business and technical viewpoints will be linked-up to define a transition roadmap for PEPPOL and the creation of CIPA.

- **Scope of the 1st Objective:** In the last months it has become apparent that the LSPs should adopt the same e-Delivery technical specifications. DIGIT is currently analysing

⁶ These specifications are messaging protocols (or interoperable interfaces) which enable heterogeneous IT systems to exchange data via a network.

⁷ Whereas requirements at semantic and organisational level vary significantly across LSPs, the need for interconnectivity at technical level is similar and the same solution could be adopted. The different levels of interoperability are explained in the European Interoperability Framework (EIF) developed by ISA.

⁸ In Q4/2011, as part of the Transition Roadmap (see 1.6.8 TECHNICAL APPROACH), DIGIT will take a decision to confirm what it will sustain

which building blocks of PEPPOL are compliant with ISA's legal basis and which of them it is able to take over from a technical standpoint⁹. The e-Delivery building block is deemed to be one of them. This means that building blocks created by PEPPOL with low level of re-usability in other sectors, i.e. specific to Procurement, may need to be sustained through other activities of DIGIT's B4 unit. These actions will be coordinated with DG MARKT.

- **Scope of the 2nd Objective:** As explained above, DIGIT may take-over the maintenance and/ or operations of PEPPOL's e-Delivery building block. Hence, DIGIT may need to correct shortcomings so that it can run it in operations efficiently and effectively.
- **Scope of the 3rd Objective:** DIGIT will work with the LSPs on the e-Delivery convergence i.e. PEPPOL (BusDoX), SPOCS (SOAP REM), epSOS (epSOS messaging protocol) and e-Codex (in the process of selecting the technical specifications for its e-Delivery building block). PEPPOL's e-Delivery building block will most likely need to be somewhat adapted to support the common technical specification. As this is not expected to happen before the end of the PEPPOL pilot, DIGIT may take over the migration of PEPPOL's building block.

⁹ The ISA programme can sustain building blocks of the LSPs having the potential to support cross-border and cross-sector interaction between Public Administrations

1.6.4 PROBLEM/OPPORTUNITY STATEMENT

1.6.4.1 Problem Statement:

This action aims at breaking the current chicken or the egg dilemma around the sustainability of the LSPs, by promoting the re-use of the same e-Delivery building block in different sectors. So far the LSPs have invested independently in infrastructural building blocks to make their key cross border public services available on-line. As shown by research, and confirmed by the LSPs, the creation of a building block such as e-Delivery requires considerable expertise and financial resources. As an LSP is only active for a few years, it is usually not enough time for public administrations to change their e-Delivery building block and market players to embrace new technical specifications. More time is required for these changes to happen. Hence, the Commission must intervene to ensure that a common e-Delivery building block runs in operations once the LSPs end. Otherwise key on-line public services may stop in embryo.

At the same time, it is also becoming apparent that Pan-European projects can be delayed by the lack of infrastructural building blocks but also by the existence of several of them with the same purpose. For example, each LSP has created its own e-Delivery technical specification on top of ubiquitous standards like http and SOAP (also referred to *web-services* standards) to meet sector specific requirements. In this context, PEPPOL created BusDoX¹⁰, SPOCS created SOAP REM¹¹, eCodex will possibly adopt ebXML's ebMS¹². Duplication at this level is neither helpful nor cost-efficient. This means that fragmentation is a roadblock that gets in the way of re-use and that generates even further fragmentation. This confirms that the Commission should intervene by creating CIPA. Its adoption by several large projects should, at some point, lead to the creation of a User base which makes it interesting for software vendors to offer similar *off-the-shelf* commercial and Open Source software.

1.6.4.2 Opportunity Statement:

DIGIT will undertake this project to create CIPA consistent with the strategic intent of the *Digital Agenda for Europe* and *The eGovernment Action Plan 2011–2015*. DIGIT will enable Member States and the Commission to reap economies of scale and synergies from the sharing of infrastructural building blocks and technical specifications across sectors. This will benefit the delivery of cross-border services, corner stone to the digital internal market, and indirectly create incentives for their adoption by software vendors and future Pan-European projects. To reap the benefits of Single Market “*Acquis Communautaire*”, wide implementation of such cross-border services is essential.

¹⁰ Now an OASIS standard

¹¹ In the process of becoming an ETSI standard

¹² OASIS standard

1.6.4.3 Link between objectives and the problem/opportunity statement

The **first objective** is linked to the problem/opportunity statement as follows:

- The LSPs have been designed to remove administrative barriers to ensure that services can be offered on a non-discriminatory basis to all businesses and citizens across Europe. Their work will not meet its objectives if not sustained by the European Commission.
- The PEPPOL pilot is planned to end in April 30th 2012. If PEPPOL is not sustained beyond this date, this may have a negative effect on some objectives put forward in the Digital Agenda for Europe such as to make available a number of key cross-border services by 2015.
- PEPPOL and the other LSPs have been given a mandate to create synergies in eGovernment solutions within a particular sector. To achieve this, each pilot was faced with the same basic challenge: come to an agreement with its beneficiaries on the definition (or re-use) of common standards or technical specifications upon which to base their cross-border services. If at organisational and semantic level each pilot is quite distinct from each other, the standards and technical specifications of their 'e-Delivery' building block could be the same. The ongoing detailed analysis of PEPPOL by DIGIT supports this direction, towards more re-use. It also highlights that the creation of purpose-built cross-border 'e-Delivery' specifications by LSPs is likely to harm cross-sector technical interoperability. Furthermore, until these technical specifications are adopted by a significant number of software vendors on their open source and/ or commercial software, financial support by the European Commission will continue to be vital. However, if re-use happens, the user community will grow and this will create incentives for the private sector to support these technical specifications¹³. Hence, the e-Delivery technical specifications and building block (sometimes referred to as reference implementations) will require careful attention.

The **second objective** is linked to the problem/opportunity statement as follows:

- The transmission of data across borders must be trusted. In the case of PEPPOL this is ensured through certificates given to its Access Points (APs), which comply with the technical specifications adopted by PEPPOL. PEPPOL's managing authority is responsible to issue these certificates and to revoke them when needed. Furthermore, the discoverability of these APs must be ensured by the managing authority as well. Without these services, the use of PEPPOL's cross-border services will not develop further.
- PEPPOL's governance is based on a set of contracts and SLAs which, to be enforced, need a certain level of oversight by its managing authority. If not monitored, the Quality of Service (QoS) foreseen in the SLAs may not be respected.

The **third objective** is linked to the problem/opportunity statement as follows:

- According to ISA's legal basis, the building blocks developed by PEPPOL must demonstrate to be "part of a consistent ecosystem of services facilitating interaction between European public administrations and ensuring, facilitating or enabling cross-border and cross-sectoral interoperability", in order to be sustained. Hence, this project

¹³ As mentioned in the report of the 2nd European CIO meeting: "For example, if several countries work together in a shared service and make public the specifications, industry will have to compete to provide the service and be stimulated to innovate in order to have a more competitive offer."

aims at sustaining an e-Delivery framework which can be used in multiple sectors of interest for public administrations and not specific to a sector.

- As explained in the 9th eGovernment Benchmark Measurement, standardization of enablers is “vitally important to cut down IT development costs, benefit from greater economies of scale and break down barriers cross border communication.”

1.6.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations	<p>The concept of a common infrastructure for public administrations is very powerful and will make possible for Public Administrations to quickly deploy key cross-border services on-line in the context of different sectoral policies. Furthermore, significant cost savings can be achieved by ensuring infrastructural convergence of the current and future LSPs.</p> <p>Member States will be able to implement cross-border public services over a common Pan-European infrastructure and benefit from the services put on-line by the LSPs such as interoperable cross-border e-Procurement through PEPPOL.</p> <p>Finally, the financial resources and work performed by the LSPs will not be lost and its sustainability will be consistent with the strategic intent of the <i>Digital Agenda for Europe</i> and <i>The eGovernment Action Plan 2011-2015</i>.</p>
European Commission services	<p>Having CIPA in place will significantly reduce the time and cost to deploy cross-border services on-line by future LSPs and other Pan-European projects.</p>
Software industry and IT service markets	<p>For the sustainability of the LSPs to be ensured, the technical specifications adopted by the LSPs should also be taken onboard by a significant number of software vendors in their commercial and open source software. This is of course not easy because many concurrent initiatives try to do this and only a limited number of interfaces can be taken onboard. However, if most of the infrastructural building blocks are truly cross-border then their dissemination across Europe will be easier as well as the adoption of the same technical specifications by the software industry. This virtuous cycle would also very much contribute for interoperability at technical level in Europe.</p>

1.6.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
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Action / Policy	Description of relation
Digital Agenda	<p>According to Action 84 (Support seamless cross-border eGovernment services in the single market) the Interoperability Solutions for European Public Administrations (ISA) programme is an important instrument that could analyse and suggest ways to ensure the sustainability of common services and generic tools developed and demonstrated in the Large Scale Pilots. (...)</p> <p>In 2011: The Commission will continue to support the experience sharing and good practice exchange between running and new Large Scale Pilots. The Commission will launch studies to assess critical sustainability issues of the STORK and PEPPOL Large Scale Pilots. The Commission will launch a study to analyse the existing and future needs and cost benefit of cross-border eGovernment services and assess the organisational, legal, technical and semantic barriers together with the Member States.</p> <p>In 2012: The Commission will facilitate the exchange of views with the Member States to identify which new cross-border services could be piloted under the CIP ICT PSP programme and which services could possibly be rolled out in 27 Member States.</p>
The European eGovernment Action Plan 2011–2015	<p>According to Action 23 (Roll out Large Scale Pilot projects and start new ones, coordination and re-use of results & solutions) the Commission will support and coordinate the efforts of Member States to roll out Large Scale Pilot projects and to start new ones, while encouraging coordination and re-use of results and solutions between them.</p>
DECISION No 922/2009/EC on Interoperability Solutions for European Public Administrations (ISA)	<p>Article 3 - Activities</p> <p>The ISA programme shall support and promote:</p> <ul style="list-style-type: none"> (a) the establishment and improvement of common frameworks in support of cross-border and cross-sectoral interoperability (...) (c) the operation and improvement of existing common services and the establishment, industrialisation, operation and improvement of new common services, including the interoperability of public key infrastructures (PKI); (d) the improvement of existing reusable generic tools and the establishment, provision and improvement of new reusable generic tools.

1.6.7 ORGANISATIONAL APPROACH

1.6.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
ISA	The ISA Committee will oversee the project, with the assistance of the ISA Coordination Group. The project will regularly report to the ISA Trusted Information Exchange Workgroup.
DG INFSO Unit INFSO.H.2 ICT for Government and Public Services	This unit of DG INFSO is one of the associated services of this project. The cooperation with INFSO is key to the success of this project. DG INFSO is the primary link between the LSPs and the Commission.
DIGIT Unit DIGIT.B.4 Information Systems for Policy Support, Grant Management, e-Procurement	This unit is the service in charge of this action. It will coordinate, together with DG INFSO, the interaction between the different stakeholders within the European Commission and the LSPs. This unit is also responsible for the Open e-PRIOR project, a main accelerator for connecting Public Administrations to PEPPOL.
DG MARKT Unit MARKT.C.4 Economic Analysis and e-Procurement	This unit of DG MARKT is an associated service of this project and responsible for the activities around EU's e-Procurement policy. DG MARKT has already worked with DIGIT in several e-Procurement projects. This fruitful partnership will continue to provide support and guidance to this project.
DG ENTR Unit ENTR.D.3 ICT for Competitiveness and Industrial Innovation	This unit of DG ENTR is also an associated service of this project and responsible for the activities around EU's standardisation policy. Its participation is essential given the importance of open specifications in the context of e-Procurement and infrastructural building blocks in general.
Other European Institutions	All European Public Institutions may provide input and be informed about CIPA. The intention is that they re-use it in their projects.
Standardisation Bodies	<p>OASIS – BDX: The new OASIS Business Document Exchange (BDX) Technical Committee is being formed by proponents of PEPPOL. The PEPPOL's BusDoX are therefore currently transitioning to OASIS.</p> <p>OASIS – ebXML: In 2003, a study of IDA, "Business to business frameworks for IDA networks", recommended the adoption of ebXML's ebMS as the e-Delivery framework of Pan European projects in the case of regulated exchange. Despite that not by used by PEPPOL, SPOCS or epSOS, eCodex is now considering adopting it and is likely to recommend that the other LSPs to converge to it.</p> <p>ETSI – REM: ETSI has worked with SPOCS in the creation of a web-services version of REM, know as SOAP REM.</p>

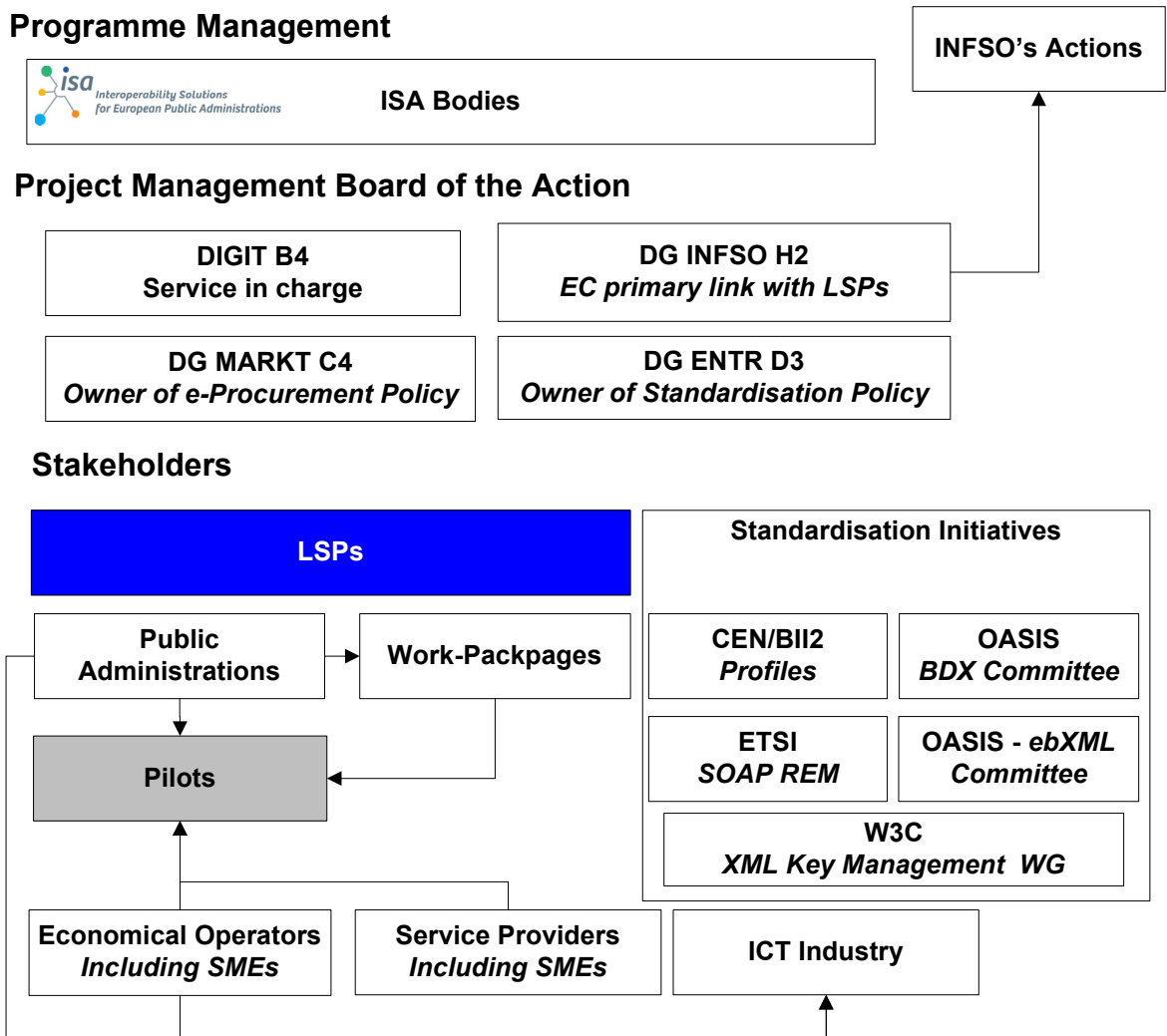
	<p>CEN/ISSS WS/BII 2: As both e-PRIOR and PEPPOL are amongst the first projects to implement the CEN BII profiles, it is therefore very important to understand the sustainability of CEN BII 2.</p> <p>W3C XKMS: The specification of PEPPOL WP1 is based on the XML Key Management Specification (XKMS).</p>
European Public Administrations	<p>Any public administration in Europe is a target user for implementing the technical specifications of the LSPs. This project will analyse whether the value proposition offered by PEPPOL is aligned with their needs.</p>
LSPs	<p>PEPPOL Consortium: We will coordinate our action with the pilot closing activities of the PEPPOL project.</p> <p>SPOCS: This LSP is currently participating in the meetings to converge the e-Delivery technical specifications in use by the several LSPs.</p> <p>eCodex: This LSP is currently participating in the meetings to converge the e-Delivery technical specifications in use by the several LSPs.</p> <p>STORK: We will coordinate our action with any follow up actions to the STORK sustainability initiative.</p> <p>epSOS: This LSP may also join the meetings to converge the e-Delivery technical specifications in use by the several LSPs.</p>
Market Players	<p>Economical Operators: Economical operators are Users of public services and the actors from where public administrations procure products and services. They will therefore benefit from the CIPA since improved electronic collaboration will enable Public administrations to provide required information, documentation and certification quickly and reliably.</p> <p>ICT Industry (ERP Software Vendors and System Integrators): Economical operators might take onboard the technical specifications of the several LSPs in their software. Once a software vendor has implemented such a connector, they can play an important role in promoting the LSPs and interconnecting other economical operators and public administrations without the need for developing new interfaces.</p>

1.6.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
LSPs Convergence Meetings	PEPPOL, SPOCs, e-Codex, and DIGIT	These meetings are arranged by DG INFSO on ad hoc basis
Bilateral meetings with DG INFSO	DG INFSO and DIGIT	These meetings are arranged by DIGIT on ad hoc basis
Bilateral meetings with DG MARKT	DG MARKT and DIGIT	These meetings are arranged by DIGIT on ad hoc basis
Bilateral meetings with DG ENTR	DG ENTR and DIGIT	These meetings are arranged by DIGIT on ad hoc basis
Meetings with other ISA projects	All ISA projects may be contacted	These meetings are arranged by DIGIT on ad hoc basis
Meetings with Policy DGs	All Policy DGs may be contacted	These meetings are arranged by DIGIT on ad hoc basis
Meetings with Standardisation Bodies	OASIS, ETSI, CEN, and DIGIT	These meetings are arranged by DIGIT on ad hoc basis
ISA Trusted Information Exchange Cluster	DIGIT team members, Member States representatives, ISA unit	These meetings are arranged by the ISA unit at least on a quarterly basis
Relevant e-Government meetings and events	DIGIT with any other project stakeholder	DIGIT is invited to participate in meetings organised by Member States, the LSPs, e-Practice, etc.

1.6.7.3 Governance approach

First and foremost, this action is part of the ISA programme and it therefore follows ISA's governance structure. This action will actively involve the Member-State representatives in ISA's Trusted Information Exchange cluster (under the "key enablers for interoperability" theme) and ISA's Coordination Group. To achieve its objectives this project will work closely together with DG INFSO, other DGs of the European Commission, Standardisation Bodies and the LSPs (or any actions related to their closing). Particular attention will be given to the coordination between this action and any future actions of DG INFSO in the e-Government area. Together, DIGIT and DG INFSO will steer this action. This 3-layer model is shown in the picture below.



1.6.8 TECHNICAL APPROACH

As PEPPOL will be the first LSP to benefit from CIPA, the first deliverable of this project is a Business Gap Analysis, which includes the Lessons Learnt of PEPPOL's production pilots and a Take-Over Feasibility Study. Any possible take-over issue is therefore being identified before the PEPPOL project ends so that it can be jointly analysed. Afterwards, and based on the collected input, improvement alternatives and a Transition Roadmap will be outlined to potentiate the realisation of quick wins, mitigate the migration risks and ensure that relevant PEPPOL's key public services are kept alive so that European public administrations can continue to use them. A number of DGs (DG MARKT, DG INFSO and DG ENTR) will continue to be involved in the transition process to ensure that the LSP's sustainability is all embracing, aligned with the vision for e-Procurement and coherent with the European e-Government strategy.

The results of the governance model exercise, currently being carried-out by the PEPPOL project, will be taken on-board as a fundamental input of this project.

Service management methodologies such as ITIL will be used for the production of the Take-Over Feasibility Study and Operations. Benefits management (VAST), Project and Change management (PM2) and Enterprise Architecture (CEAF) methodologies and frameworks will be used in the production of the Business Gap Analysis. The Rational Unified Process (RUP) will be used for software development and enhancement.

Phase 1: Inception

Work-Package "Take-over Feasibility Study": This action establishes a realistic understanding of:

- The Commission's capability to operate and/ or host the building blocks coming from PEPPOL. This involves identifying these building blocks and understanding the requirements for migrating them to operation in a scenario where the PEPPOL community, translated by the number of PEPPOL Access Points and consequently end-users, will most likely grow.
- The Commission's capability to provide the services related to the daily operation of PEPPOL's central components (such as the SML), support to PEPPOL's local /de-central components (such as Access Points and SMPs), and support new Public Administrations. This also involves the identification of these services, their requirements and their extent in the context of a federated architecture where the boundaries between central and local responsibilities will not always be clear. Additionally, given the on-going convergence process, the technical specifications of PEPPOL's e-Delivery building block will most likely evolve and the linkages between this domain and the operational service model (e.g. change management) require detailed analysis to ensure the smooth evolution of the overall PEPPOL ecosystem.

Phase 1: Execution

Work-Package "Business Gap Analysis": In addition to the take-over feasibility study described above, this project analyses the value of the several building blocks and tools which are to be migrated to operation. This track looks beyond the technical elements and focuses on the

alignment of PEPPOL to the objectives of ISA. If not considered any of these elements may, at some point, stand in the way of their widespread use by public administrations. This work-package will be divided into two separate tracks:

- Track 1—Analysis of Business Sustainability
- Track 2—Analysis of Pilots Lessons Learned

Work-Package “Transition Roadmap”: The findings collected at the previous step will be consolidated and used by DIGIT to decide which PEPPOL building blocks to sustain. Following the decision step, a transition roadmap will be created. Particular attention will be given to the alignment between the building blocks to be sustained and European policy initiatives related to the internal market. Building blocks created by PEPPOL with low level of re-usability in other sectors, i.e. specific to Procurement, may need to be sustained through other activities carried on within the unit B4 of DIGIT. At technical level, the convergence of e-Delivery technical specifications will be analysed and added to the Transition Roadmap.

Work-Package “Detailed Design of Target Operating Model”: This step will aim at detailing the operational IT services (including support to the implementation of CIPA’s Access Points and support to their deployment throughout Europe) and also the daily infrastructure management processes in accordance with the transition roadmap.

Work-Package “Migration Plan”: This work-package will outline the migration to the envisaged Target Operating Model.

Work-Package “Monitoring the implementation of Transition Roadmap”: The implementation of the transition roadmap will be accompanied by a monitoring process to ensure that risks are managed and the schedule respected.

Phase 1: Operational

Phase 1 will end with the transfer and set up of infrastructural building blocks (see reference to the decision step in WP “*Transition Roadmap*”). Their Hand-Over and Take-Over will be based on the transition roadmap.

Phase 2: Inception

Update of the Project Charter to reflect the new scope of the action. The project charter will make it possible for DIGIT to agree at the outset what the desired outcome should be for Phase 2, so that its different team can then focus on the critical work-streams. This will also support stakeholder communication by providing a roadmap of the full definition of CIPA’s e-Delivery building block.

Phase 2: Execution

Work-Package “e-Delivery Migration”: In the context of this work-package, DIGIT will work on these 3 steps:

- **Step 1:** Interact with the LSPs on the convergence of e-Delivery technical specifications.
- **Step 2:** Extension of the Service Metadata Publisher and Service Metadata Locator so that it supports technical parameters to be used during the migration process i.e. dynamic discovery of messaging protocol.

- **Step 3:** Development of converter software, embedded in the gateway, which enables the change/ or co-habitation (to be defined) of technical specifications. A decision will be taken on the exact migration steps taking into account the number of active gateways so that it happens without affecting their operation.
- Work-Package “e-Delivery enhancements”: In the context of this work-package, DIGIT will:
- **Step 1:** First iteration to implement first priority requirements regarding the monitoring of the operations and the respect of the SLAs for Quality of Service (QoS) purpose.
- **Step 2:** Second iteration to implement second priority requirements regarding the monitoring of the operations and the respect of the SLAs for Quality of Service (QoS) purpose.

Phase 2: Operation

DIGIT will run operations of PEPPOL’s SML and Root PKI (if decided), maintain the reference implementations of Access Points, SMPs and possibly other related software (if decided), and provide support to Public Administrations using this software and any new implementations of it. Furthermore, development work may be required to enhance SLA monitoring capabilities.

1.6.9 COSTS AND MILESTONES

NB: For Phase 2 the table below shows the initial estimates under the assumption that PEPPOL's e-Delivery solution will be sustained and that DIGIT will migrate it to the common e-Delivery technical specifications agreed by the LSPs. DIGIT will also operate, maintain and enhance it. However, the accurateness of these estimates is dependent on the outcome of Phase 1.

1.6.9.1 Breakdown of anticipated costs and related milestones

Phase: Inception / Execution / Operational	Description of milestones reached or to be reached	Cost (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Phase 1 Inception Technical Track	Project Charter + Technical Track	200	ISA	Q3/2010	Q2/2011
Phase 1 Execution	Business Track (including Pilots Lesson Learned)	100	ISA	Q1/2011	Q3/2011
Phase 1 Execution	Transition Roadmap	100	ISA	Q2/2011	Q3/2011
Phase 1 Execution	Target Sustainability Model and Migration Plan, Monitoring and Implementation, Operational phase	200	ISA	Q3/2011	Q1/2012
Execution Report of Phase 1	Execution Report of Phase 1	0	DIGIT B4	Q1/2012	Q1/2012
Phase 1 Operational	Set-up and Transfer	250	ISA	Q1/2012	Q2/2012
Phase 2 Inception	Update of Project Charter	0	ISA	Q2/2012	Q2/2012
Phase 2 Execution	Work Package "e-Delivery Migration" Step 1	100	ISA	Q2/2012	Q4/2012
Phase 2 Operational	Operations in 2012	420	ISA	Q2/2012	Q4/2012

Phase: Inception / Execution / Operational	Description of milestones reached or to be reached	Cost (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Phase 2 Execution	Work Package "e-Delivery Migration" Step 2 Work Package "e-Delivery enhancement" Step 1	200	ISA	Q1/2013	Q4/2013
Phase 2 Operational	Operations in 2013	640	ISA	Q1/2013	Q4/2013
Phase 2 Execution	Work Package "e-Delivery Migration" Step 3 Work Package "e-Delivery enhancement" Step 2	150	ISA	Q1/2014	Q4/2014
Phase 2 Operational	Operation 2014	690	ISA	Q1/2014	Q4/2014
Execution Report of Phase 2	Update of Execution Report Phase 2	00	DIGIT B4	Q1/2015	Q1/2015
Phase 2 Operational	Operation 2015	660	ISA	Q1/2015	Q4/2015
	Total	3.710			

1.6.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Inception Phase 1	200	200
2011	Execution Phase 1	400	400
2012	Operational Phase 1	250	
	Execution Phase 2	100	
	Operational Phase 2	420	
2013	Execution Phase 2	200	
	Operational Phase 2	640	
2014	Execution Phase 2	150	
	Operational Phase 2	690	
2015	Operational Phase 2	660	

1.6.10 ANNEX AND REFERENCES

Description	Reference link
Digital Agenda	http://ec.europa.eu/information_society
eGovernment Action Plan	http://ec.europa.eu/information_society
ISA legal basis and reference documents on interoperability	http://ec.europa.eu/isa/

1.7 E-PRIOR

1.7.1 CONTEXT

1.7.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG DIGIT
Associated Services	DG MARKT.C4 - DG ENTR.D4

1.7.2 OBJECTIVES

The PEPPOL project, a Large-Scale Pilot of e-Procurement supported by the CIP programme, is developing a pan-European network for Public Administrations to use, mainly, in cross-border e-Procurement. Alongside this initiative, the e-PRIOR project, supported by the IDABC programme, has developed an electronic services platform which helps Public Administrations connecting their back-office systems to the PEPPOL infrastructure. When used jointly, these systems become key enablers of end-to-end trusted information exchange and semantic interoperability. Despite the many opportunities emerging from the combined use of these technologies, it is known that their adoption by Public Administrations usually does not happen quickly. Nonetheless, the growth of cross-border e-Procurement depends on the number of Public Administrations connected to PEPPOL. If this process takes too long, the current momentum could be lost.

This project will harness the use of the e-PRIOR system to accelerate the connection to PEPPOL by European Public Administrations. This action will build further on the e-PRIOR project to fulfil the following objectives:

1. Contribute to the success of the PEPPOL pilot and generalise cross-border trusted information exchange by promoting the use of the open source version of e-PRIOR throughout European Public Administrations.
2. Help the transition of PEPPOL into production by promoting the industrialisation of e-PRIOR's infrastructure service components and consequently the reuse of these building blocks in other sectors.

By fulfilling these objectives, the project will not only stimulate trusted information exchange and semantic interoperability, 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.

1.7.3 SCOPE

Following the defined objectives, the scope of this project is divided in activities supporting the PEPPOL pilot and activities which support the transition of PEPPOL into production.

Activities linked to the first objective:

1. Set an example and contribute to the creation of critical mass

As stated above, PEPPOL will benefit if many European Public Administrations participate in its piloting. Thanks to e-PRIOR and its successful deployment in production at DIGIT, the European Commission is already today equipped with one of the most mature electronic services platform in the e-Procurement domain. Since the core elements are already in place, the participation in the pilot can be achieved within a relatively short time provided the availability of resources. Participation as from day one will show additional commitment and involvement at European level. This initiative will also help to pave the way for Public Administrations willing to join PEPPOL. The creation of critical mass will accelerate wide adoption of PEPPOL and thus promote cross-border e-Procurement in Europe.

2. Support Member States in the implementation of e-PRIOR throughout the PEPPOL pilot

During the PEPPOL pilot, a helpdesk will be set up to support Public Administrations in the deployment of e-PRIOR's open sourced version. In its first three months, the first release of e-PRIOR's open sourced version on the OSOR website has triggered more than 350 downloads. According to the feedback received, additional support would help Public Administrations to test and learn more about this platform, thus accelerating its use in operations and possibly in other sectors.

3. Support the sustainability and evolution of the core interoperability enablers of PEPPOL

Already today, e-PRIOR implements several profiles specified by the CEN/ISSS WS/BII covering e-Catalogue, e-Ordering and e-Invoicing. This project will participate in the follow-up of this initiative, the second CEN/ISSS WS/BII, to ensure the sustainability and proper evolution of these profiles. Additionally, e-PRIOR will be enhanced to cover the full post-awarding procurement process, from Sourcing to Payment, as well as the pre-awarding procurement process, from Publication to Awarding which will widen the contribution of this project to this standardisation initiative. All implemented profiles will afterwards be made available over the PEPPOL network.

4. Facilitate adoption by adding a GUI

Currently, e-PRIOR offers a web services interface which can be accessed by any machine. However, by enhancing e-PRIOR with a Graphical User Interface, Public Administrations could enable Small and Medium Enterprises to interact with e-PRIOR using the ubiquitous web-browser. This, together with the out-of-the-box connection to the PEPPOL network, will make e-PRIOR very attractive to the MS administrations and thus accelerate the adoption of cross-border e-Procurement in Europe.

5. Proactive assistance to Public Administrations

Alongside the above activities, the project team will engage in proactive assistance to Public Administrations. Public Administrations may not know how to benefit from the products of this project. This will also mean that they will not contact the project team. To mitigate this risk, and in coordination with ISA's communication initiative, the project team will proactively disseminate information on e-PRIOR in collaborative platforms such as ePractice.eu or SEMIC.eu, participate in selected expert groups, conferences, contributions to news articles and production of various

communication artefacts. Additionally, this project will also encourage e-Procurement within the European Institutions to promote the involvement and direct engagement of these stakeholders.

Activities linked to the second objective:

1. Support of the UN/CEFACT XML standard i.e. CII v2

Today, e-PRIOR supports the UBL2.0 XML specification as specified in the CEN/ISSS WS/BII profiles. In the near future, PEPPOL is expected to also support the UN/CEFACT XML standard. After investigating its feasibility, the required developments will be made in e-Prior to support this standard. In any case, UBL will continue to be supported given the community of Users.

2. Support of Advanced Electronic Signatures

Today, e-PRIOR is working in an EDI concept for the VAT compliance of the e-Invoicing module. The decision for using EDI was driven by the business requirements of the original User community. EDI will continue to be supported, but for certain modules or in certain cases, Advanced Electronic Signatures will also become option. This implies that signing and verification mechanisms will be supported by e-PRIOR. This will enable experimenting, for example, the use of e-catalogues in the pre-awarding phase, where no contractual relationship exists, and covering a wider range of legislations, hence paving the way to a cross-sector use.

3. e-Procurement in a pre-awarding context

An e-Catalogue gap analysis performed under the IDABC e-PRIOR project revealed significant gaps but also some matches between the pre- and post-award use of electronic catalogues. One of the conclusions of this study however is that e-PRIOR can play an important role in the integration of e-Tendering systems with the procurement back-office systems of public administrations.

In a first stage, a feasibility study will focus on the requirements of the e-Submission / e-Awarding process, and investigate what can be re-used from the PEPPOL Virtual Company Dossier (VCD), but also the OPOCE e-Publication / e-Notification project, and the standardization work for pre-award done in the CEN/BII 2 workshop. This study will also look into the Dynamic Purchasing System (DPS) and e-Auctioning.

In a second stage, the envisaged solutions will be further analysed and implemented.

1.7.4 PROBLEM/OPPORTUNITY STATEMENT

This action will exploit the opportunities presented by the joint use of the PEPPOL network and the e-PRIOR system. Historically, Member States have implemented non-interoperable solutions for e-Procurement at one or several levels of the administrations (Central, Regional or Local level). Today, this heterogeneity greatly hinders the growth of cross-border e-Procurement. Even at national level e-Procurement suffers from these same issues: diversity and complexity. Given this panorama, some Member-States remain reluctant to expand / or jump start the use of e-Procurement.

Together the PEPPOL and e-PRIOR projects generate a significant opportunity for Europe to boost the use of e-Procurement. This project will enable Public Administrations to easily get connected to PEPPOL via the reuse of, the proven and tested, e-PRIOR platform (which embeds a PEPPOL gateway among other added-value services).

The reuse of e-PRIOR will help increase the number of PEPPOL gateways deployed in European countries. By not reinventing the wheel each time, European Public Administrations will be able to spend less, focus on what is important and take advantage of what already works well (at the European Commission). As the private sector gets on board, e-PRIOR will also serve as a learning tool for private companies to develop their own e-Procurement commercial solutions based on European standards. System integrators will also benefit because they will have several packages, commercial and open source, to propose to Public Administrations for implementation.

As a result, the generalisation of trusted information exchange¹⁴ will contribute to the take up of interoperable e-Procurement, the sustainability of PEPPOL and the reuse of these building blocks in other sectors.

Advanced contacts with Public Administrations of several Member States and a survey amongst the beneficiaries of PEPPOL showed that the availability of open-source e-Procurement tools is perceived as very valuable for Member States. It also revealed that Public Administrations not having already implemented e-Procurement tools are interested in open-source solutions, such as the e-PRIOR system, under the condition that they are well-documented and support is guaranteed. Discussions with online service providers and ERP software vendors clearly identified an interest from the private sector to support the public sector in implementing interoperable e-Procurement solutions and standards.

1.7.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations - implementers of Public Services	<ul style="list-style-type: none"> ○ Free-to-use open source tool, e-PRIOR, for implementing electronic public services such as post-awarding e-Procurement, for which a maintenance and further development is guaranteed. This system includes out-of-the-box functionality – the PEPPOL Connector – to connect to the PEPPOL infrastructure; ○ Free-to-use open standards for data and processes (CEN/ISSS WS/BII) that have been tested in a real-life environment ; ○ Shared experience in and support for setting up post-awarding e-Procurement; ○ Large cost savings and efficiency improvements, with reduced investment; ○ Provide example of a real-life implementation of the European Interoperability Framework (EIF); ○ The dissemination of e-PRIOR to Member States in the context of e-Procurement is a first step in making this platform available for cross-sector re-use. Once the Member States' Administrations use e-PRIOR, they can use it for any electronic business

¹⁴ See action 1.8 Trusted Exchange Platform

Beneficiaries	Anticipated benefits
	document exchange. E-PRIOR could be used to facilitate e.g. the legislative process between the European Commission and the national parliaments, through integrating e-Greffe with e-PRIOR.
Stakeholders of the PEPPOL project	This action will alleviate the effort required by Public Administrations to connect to PEPPOL during and after its pilot thus accelerating the adoption of this enabler of interoperability.

1.7.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
The PEPPOL project (CIP Large Scale Pilot – DG INFSO)	As a complementary solution, e-PRIOR contributes to the success of PEPPOL
Green Paper on expanding the use of e-Procurement in the EU (DG MARKT)	e-PRIOR is seen as an important action to support e-Procurement in Europe (Chapter 4 of the green paper – "Commission financed and steered actions to support e-Procurement").
Communication on e-Invoicing (DG MARKT / DG ENTR)	The European Commission is leading by example by implementing e-Invoicing for own public procurement purposes, through e-PRIOR. (action 6.2)
Digital Agenda	Interoperable e-Procurement and leading by example are explicitly mentioned in the Digital Agenda (see Key Action 16 and related "other actions")

1.7.7 ORGANISATIONAL APPROACH

1.7.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
ISA	ISA Coordination Group
DIGIT.B4	Angelo Tosetti, Didier Thunus, Tanya Chetcuti, Yuliya Krumova,

	Guilaine Binet
DIGIT.R	Arturo Caballero Bassetas
DG MARKT.C4	Niall Bohan, Sara Piller, Marco Tardioli
DG ENTR.D4	Antonio Conte, Nathalie Pasquier
DG INFSO.H2	Jean-François Junger, Hannele Lahti
PEPPOL Consortium	Klaus Vilstrup Pedersen, Carmen Ciciriello
European Public Administrations	
Economical Operators	
Service Providers	
ERP Software Vendors	
CEN/ISSS WS/BII 2	

1.7.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
ISA TIE Working Group	e-PRIOR team member	Quarterly
PEPPOL Conference	e-PRIOR team member	Yearly
EXPP Summit	e-PRIOR team member	Yearly
CEN/ISSS WS/BII	e-PRIOR team member	Quarterly
CEN/ISSS WS/E-Invoicing 3	e-PRIOR team member	Ad-hoc
DG MARKT e-Procurement Working Group	e-PRIOR team member	Quarterly
EC Multi-Stakeholder Forum on e-Invoicing	e-PRIOR team member	Quarterly
Conferences on e-Procurement, e-Invoicing or e-Government	e-PRIOR team member	+/- Monthly
e-Practice	(online)	
OSOR	(online)	

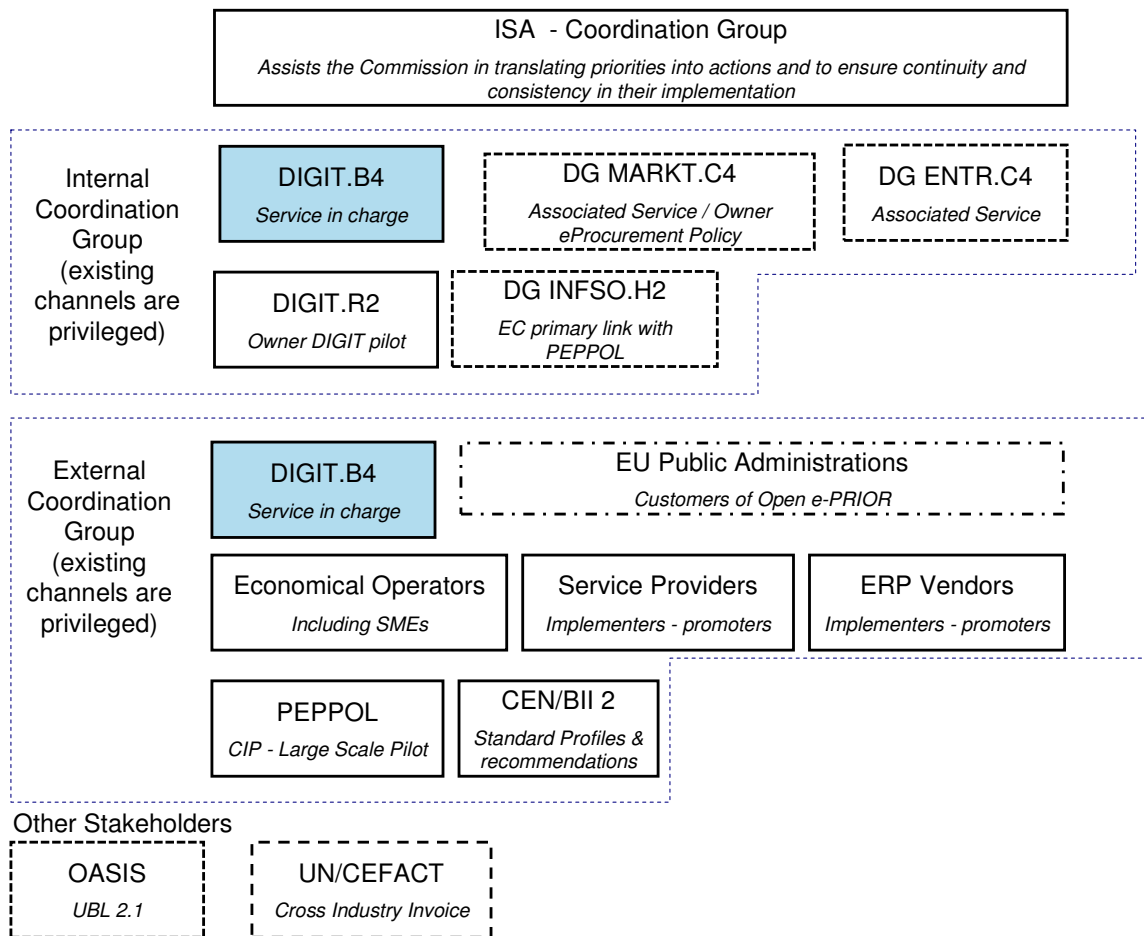
Event	Representatives	Frequency of meetings / absolute dates of meetings?
LinkedIn e-PRIOR Group	(online)	

1.7.7.3 Governance approach

The e-PRIOR participation to PEPPOL will be considered as one of the PEPPOL Pilots. A close collaboration between the two projects is already in place and will continue to be harnessed.

Bi-weekly project review meetings (review of the project progress), alternated by bi-weekly team meetings (review of the individual tasks) will ensure the timely delivery of the project and the involvement of the associated services, DG MARKT and DG ENTR. Additionally, a coordination group will be used to bridge the perspectives among the internal stakeholders and another one, with similar purposes, for external stakeholders. These groups will have the mission to ensure the successful governance of efforts in the internal and external ecosystems. These groups will not be formal committees but a set of mechanisms using the existing communication channels, workshops and meetings. The basic principle is that these groups should be versatile and empowering with minimal bureaucracy overhead. Of course that when and if required, these groups may be further formalised into committees.

Regarding the methodologies, RUP@EC will be used for software development and ITIL for service management. The governance structure is summarized in the schema below:



1.7.8 TECHNICAL APPROACH

This project will be realized in three stages as depicted in the high-level project plan, provided in the last page, as explained hereunder.

The kick-off phase of the project will be the Inception phase whereby a project charter will be set up for defining in more detail the activities within the scope of this project, as explained in section 1.7.3.

Following the project charter phase, the project is then executed in 2 separate phases as follows:
Phase 1 will focus on those activities which will contribute to the success of the PEPPOL pilot and generalisation of cross-border trusted information exchange by promoting the use of e-PRIOR.
Phase 2 will focus on supporting the transition of PEPPOL into production in coherence with the PEPPOL Sustainability Plan and the upcoming Green Paper on e-Procurement of DG Markt.
Phase 2a covers the further enhancements to the post-award procurement process, while phase 2b will look into the pre-award procurement processes.

These phases are aligned with the objectives in section 1.1.2.

It is proposed that each of the two phases defined above will be executed in two sub-phases, being an Execution sub-phase and an Operational sub-phase. The activities involved in the

Execution sub-phase will contribute towards the development of further functionality in order to support the goal of the phase whereas the activities for the Operational sub-phase will contribute towards providing the necessary support. Where possible, the existing e-PRIOR project team and the applied development tools and methodologies (based on RUP@EC for software development and ITIL for service management) will be used, in order to ensure the continuity of the e-PRIOR project.

Given that the PEPPOL programme of works is still unclear for the post-pilot period this proposal shall request funding for the activities of Phase 1 only as they are within the scope of the current programme of works of PEPPOL. A revision will later be made in order to reflect better the activities planned for Phase 2 once the PEPPOL post-pilot implementations are more clearly defined.

The results of each development phase will be formally documented by an execution report.

1.7.9 COSTS AND MILESTONES

1.7.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Project charter	0	DIGIT internal resources	Q1/2010	Q2/2010
Phase 1: Support the PEPPOL pilot and promote the use of e-PRIOR					
Execution	Phase 1 - Execution report	2.950	ISA	Q2/2010	Q2/2011
Operational		750	ISA	Q2/2010	Q4/2011
Phase 2: Support the transition of PEPPOL into production					
Execution	Phase 2a - Execution report (UN/CEFACT, e-Signature, GUI for SMEs)	1.050	ISA	Q3/2011	Q4/2013
Execution	Phase 2b - Execution report (Pre awarding)	1.850	ISA	Q3/2011	Q4/2013
Operational		600	ISA	Q1/2012	Q4/2013
	Total	7.200			

1.7.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Execution	1800	2.149
2010	Operational	350	
2011	Execution	1450	
2011	Operational	400	
2012	Execution	1300	
2012	Operational	300	
2013	Execution	1300	
2013	Operational	300	
2014			
2015			

1.7.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
Green Paper on expanding the use of e-Procurement in the EU (DG MARKT)	http://ec.europa.eu/internal_market/consultations/docs/2010/e-procurement/green-paper_en.pdf	
Communication on e-Invoicing "Reaping the benefits of electronic invoicing in Europe" (DG ENTR / DG MARKT)	http://ec.europa.eu/enterprise/sectors/ict/files/com712_en.pdf	
Digital	http://eur-	

Agenda	lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:PDF	
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1.8 TRUSTED EXCHANGE PLATFORM (E-TRUSTEX)

1.8.1 CONTEXT

1.8.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG DIGIT
Associated Services	SG A.1.A1, SG.G.3, SG.R.3, DG COMP R.3, REGIO.A.4, MARKT.B.1

1.8.2 OBJECTIVES

The initial goal of this project was to provide a Trusted Exchange Platform re-using the existing e-PRIOR infrastructure and to prove its cross-sector re-usability.

The main objective of this action is now to support public administrations in the implementation of European policies in different sectors by promoting Interoperability through re-use. The specific objectives of this action are:

- Demonstrate the re-use of the e-TrustEx platform in several sectors. This will show that e-TrustEx can accelerate the implementation of secured exchange of information between Publication Administrations cross-border and cross-sector. Additionally, this platform will facilitate the automation of document exchange choreographies and offer value added services such as a canonical data model (semantic shield), validation and routing of information. When needed and possible, the receipts given by the post (with legal equivalent value) will be replaced by electronic receipts. 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.
- Definition of a holistic Architectural Vision. This will be derived through the analysis of the CIP Large Scale Pilots, e-PRIOR and other exchange platforms. It is clear that the implementation of this vision will most likely inherit many of the challenges which are currently being debated by the CIP LSPs. Therefore, the execution of this project will include active participation in the ongoing action to harmonise the CIP document exchange platforms. The roadmap of e-TrustEx will further detail how the Architectural Vision will be implemented taking into account any dependencies on other actions.

1.8.3 SCOPE

This action mostly addresses the domain of Administration-to-Administration (A2A) information exchange and is related to the Trusted Information Exchange cluster of ISA. It is split into several Phases, the details of which are given in the section "*Technical approach*".

The main activities for Phase 1 are:

1. Customize and extend e-PRIOR in order to automate document workflows by exchanging information, such as legislative and competition related documents in PDF, Word, etc in electronic format via a reliable and secure platform. Envisaged recipients are permanent representations, national parliaments, local governments, EU institutions, national competition authorities and others;
2. Develop extensions to allow the exchange of large documents, generic "bundles" of documents, and their sending in multicast mode;
3. Development of a GUI to send and receive documents.

The main activities for Phase 2 are:

1. Finalise the definition of an Architectural Vision and Roadmap resulting from:
 - a. Analysis of similar initiatives (e.g. EESSI of DG EMPL or PEC of the French "Direction Générale pour la Modernisation de l'Etat");
 - b. Discussion with representatives of Member States participating in the ISA Trusted Information Exchange cluster;
 - c. Consultation of IRMs in the DGs of the European Commission;
 - d. Coordination with on-going activities on convergence of transport infrastructure in the CIP pilots.
2. Review of the Platform after the conclusion of Phase 1 to facilitate its release in Open Source (this also includes additional configurability features to reduce costs in supporting new types of exchanges and to facilitate the "sustainability" of the platform, once implemented by Member States in their own context);
3. Part 1 of Architecture Roadmap Implementation
4. Implementation of pilots.

The main activities for Phase 3 are:

1. Part 2 of Architecture Roadmap Implementation
2. Implementation of pilots

The main activities for Phase 4 are:

1. Part 3 of Architecture Roadmap Implementation
2. Implementation of pilots

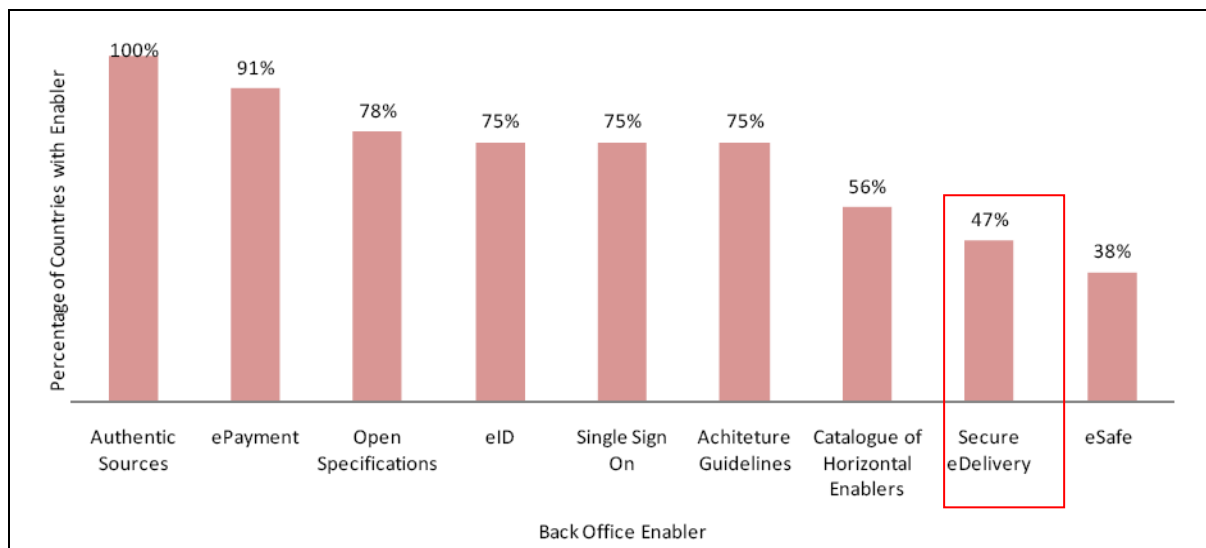
NB: The exchange of classified documents is out of the scope of this action. Regarding the scope of the support model:

- In the context of each pilot, the DG responsible for the system connected to e-TrustEx will provide direct support to its Users. This means that the service desk of each pilot will be run by the pilot beneficiaries and not the e-TrustEx team.
- The support and deployment model of the e-TrustEx platform is further detailed in the Architectural Vision. Technical documentation and technical support by the eTrustEx team will cover all aspects related to the platform as a re-usable tool (e.g. the specifications of the technical interface and of the several components of the platform).

1.8.4 PROBLEM/OPPORTUNITY STATEMENT

European policy increasingly requires information between public administrations in the EU Member States to be exchanged electronically. To enable the sharing of data across the 27 Member States, their systems must be made interoperable. Public administrations are therefore receiving increasingly frequent requests to take action and to switch from paper, e-mail or other non-interoperable solutions to secured electronic information exchange.

According to the 9th Benchmark Measurement, out of nine horizontal enablers which have been analysed through country surveys and independent (part) assessments, secure eDelivery is available in less than 50% of the EU27+ countries. E-TrustEx will make available a key enabler for secure eDelivery to the Member States currently lacking one.



On June 22nd, the Member States participating in the ISA Trusted Information Exchange Cluster were surveyed by the e-TrustEx project team. When asked whether "The European Commission should promote the re-use of a common set of proven and tested building blocks for cross-border (and cross-sector) data exchange e.g. ISA outputs, CIP Large Scale Project outputs, etc" 87% agreed that the European Commission should do this.

The Trusted Exchange Platform (e-TrustEx) supports policy implementation by public administrations in the European Union by:

- Piloting cross-border information exchange, in several sectors, through the same exchange platform (i.e. cross-sector re-usability of software building blocks and technical interoperability frameworks). Most of these pilots will involve a significant enhancement in the way data is currently exchanged between Public Administrations in the Member States and the European Commission;
- Making this platform accessible in open source to all public administrations in Europe (i.e. levelling the playing field by making a proved and tested interoperable solution available to all public administrations). It should be noted that this exchange platform aims at being an extensible solution, which could serve policy areas beyond the ones covered by the pilots of this initiative.

E-TrustEx itself will be developed through re-use and extension:

- First, it will be based on the building blocks of the e-PRIOR platform.
- Second, when possible, e-TrustEx will "integrate with" the building blocks coming from the CIP Large Scale Pilots. PEPPOL's transport infrastructure (BUSDOX) and SPOCS' e-Delivery framework (REM) are integral in achieving a Pan-European interconnection among existing information exchange communities.

Each of the above mentioned 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. Member States require a solution for secured message exchange, not tailor-made platforms for each specific sector with limited reach and a particular technical implementation. If an "end-to-end" solution is not available and easily accessible, the multiplication of technical specifications platforms, standards, and "e-Government clouds" are likely to continue developing in a non-coordinated way. This phenomenon may potentially lead to the creation of additional barriers and hurdles for the secure exchange of information cross-border and cross-sector, mainly due to the underlining complexity and potential interoperability issues.

The creation of this platform will be a major opportunity for Member States and the European Institutions to reduce costs by:

- Offering e-TrustEx as a Tool both to Member States and to European Institutions;
- Switching from expensive registered post to large scale digital exchange of information (e.g. in France around 25 to 40 million letters with delivery receipt are exchanged by public administrations – around 4€ to 5€ each);

- Switching from unreliable e-mail communication to secured exchange of information;
- Promoting the creation of a European ecosystem of electronic message exchange, which could serve several sectors requiring cross-border exchange of information. This should also prevent the creation of specific and ad-hoc information exchange solutions within each sector;
- Allowing the adopters of this solution to not only benefit from improved interoperability, but also to benefit from enhanced reliability, security, efficiency, and an increase in the capacity of information exchange.

Ultimately, e-TrustEx will enable the Member-States to implement commitments on interoperability and standards which are fundamental for the availability of cross-border services across Europe.

As required by the ISA decision, this platform promotes EU-wide interoperability and re-use of existing building blocks, so as to avoid duplication of effort. By supporting policy implementation in several sectors and overcoming obstacles for electronic information exchange, this action will ultimately contribute to the creation of a Digital Single Market in Europe.

Instead of working on the solution of generic but abstract requirements, the approach is to exploit the opportunities offered by the implementation of concrete examples via the interoperability of real working systems having significant functional and not functional requirements. This will contribute to the expansion of the user community, to the inclusion of more potential parties and it will also allow the coverage of additional sectors / policy areas together with the progressive support of additional features.

The identified business cases offering the opportunity to test and extend the technical platform are described in the section "Technical Approach".

Sustainability / financial Model for eTrustEx as a Tool

According to the definition given in the ISA decision "*generic tools' means reference platforms, shared and collaborative platforms, common components and similar building blocks which meet common user requirements across policy areas*". **The sustainability/financial model should be as follows:**

Case of the Platform offered to EU Institutions:

ISA should cover the development of the core / generic functionality and the technical support of the platform while the Policy DGs should fund with their own budget the integration of their back-offices, the hosting, the specific support and the development of specific functionality and extensions.

Case of the Platform offered to Member States:

ISA should cover the development of the core / generic functionality and the technical support of the platform while the Administrations of Member States adopting the platform (or the relevant Policy DGs) should manage the hosting, the specific support and the development of specific functionality and extensions.

Once all the generic developments are completed the maintenance costs will be sustained by the policy DGs that use the platform.

An important example of adoption of the eTrustEx platform (for which discussions are on-going) is in the context of the implementation of the *eCohesion* project led by DG REGIO.

1.8.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Direct Beneficiaries	Anticipated benefits
Member States' public administrations and EU institutions	<p>Switching from expensive registered post to large scale digital exchange of information (as an example, in France around 25 to 40 million letters with delivery receipt are exchanged by public administrations – around 4€ to 5€ each).</p> <p>Enable the creation of a European ecosystem of electronic message exchange which could serve several sectors requiring cross-border exchange of information. This should also avoid the creation of specific and ad-hoc information exchange solutions for each sector.</p> <p>Support secure exchange of documents between parties exceeding the capabilities of the current ways of exchange either electronically (e-mail) or physical (paper documents, CD, DVDs, faxes, etc), reducing manual work and increasing the efficiency of the whole process.</p> <p>Cost savings and improve efficiency, reduce time-to-market and ensure interoperability of information exchange at European, national, regional or local level.</p> <p>Free-to-use open source tools for national parliaments and permanent representations to send and receive electronic legal documents and metadata. These tools can be used for exchanging other electronic business documents with other stakeholders.</p> <p>Experience, lessons learnt, specifications, tools and components published as open source reusable by any Member State or EU Institution.</p>
IT services in the Commission	<p>The European Commission, because of its trans-national position, is more and more called upon to develop distributed systems to coordinate political actions in various fields. If a generic system can be defined and later put in place, it will be a very big progress for the whole interoperability issue in Europe. This would of course also represent important cost savings since the infrastructure of such systems would then be reusable.</p>

1.8.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
CIP LSPs – DG INFSO	eTrustEx will implement an Access Point to the solution deriving from the convergence of the eDelivery solutions of the CIP Large Scale Pilots.
Digital Agenda	<p>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.</p> <p>Action 26: MS to implement European Interoperability Framework Member States should apply the European Interoperability Framework at national level by 2013.</p> <p>http://ec.europa.eu/information_society/digital-agenda/index_en.htm</p>
The eGovernm ent Action Plan 2011 – 2015	<p>Action 33 "Exchanges of expertises, promotions of the re-use and sharing solution to implement interoperable eGovernment services" 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.</p> <p>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.</p> <p>http://ec.europa.eu/information_society/activities/egovernment/action_plan_2011_2015/index_en.htm</p>

1.8.7 ORGANISATIONAL APPROACH

A Project Steering Committee will be established to provide overall guidance and direction for the project with the participation of all concerned services. Working groups will be organised with different families of beneficiaries to gather their requirements.

The action is multiannual and organised in phases. Within each phase, the integration of additional back-end systems and/or the support of additional requirements will be covered.

1.8.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
ISA Coordination Group	The ISA coordination group assists the Commission in translating priorities into actions and to ensure continuity and consistency in their implementation.
DIGIT – Directorate General of Informatics of the European Commission	<p>Unit DIGIT.B.4 (<i>Information Systems for Policy Support, Grant Management, and e-Procurement</i>)</p> <p>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.</p> <p>Unit DIGIT.B.1 (<i>Information systems for document management and corporate decision making processes</i>)</p> <p>This unit is in charge of the e-GREFFE project and the coordinator of integration with A.S.A.P.</p>
DG COMP - Directorate General Competition of the European Commission	<p>Unit COMP.R.3. (<i>Information Technology</i>)</p> <p>This unit is in charge of the EDMA project and will be responsible of the development of the EDMA and GENIS specifically related modules.</p> <p>Unit COMP.R1 (<i>Document Management</i>)</p> <p>This unit is the system owner and business project manager of EDMA and represents the interests of the EDMA users.</p> <p>COMP.H (<i>State aid: Cohesion, R&D&I and enforcement</i>)</p> <p>This Directorate is the system owner of the GENIS project.</p>
Secretariat general Of the European Commission	<p>Unit SG.A1 (<i>Advice, developments and logistics</i>)</p> <p>This unit is the system owner and business project manager of e-GREFFE and represents the interests of the e-GREFFE users.</p> <p>Unit SG.R3 (<i>Information Technology</i>)</p> <p>This unit is the system supplier of A.S.A.P..</p> <p>Unit SG.G3 (<i>European Economic and Social Committee, Committee of the Regions, European Ombudsman and National Parliaments</i>)</p> <p>This unit is the system owner of A.S.A.P..</p>
DG MARKT – Directorate General for Internal Market and Services of the European Commission	<p>Unit MARKT.B.1 (<i>Internal Market Information System</i>)</p> <p>This unit is the owner of the IMI system. The expansion strategy of IMI in other sectors considers eTrustEx as complementary to the IMI system. In fact IMI currently supports the exchange of data and information between end-users. In addition to these features, eTrustEx could provide Member States with the possibility to exchange information securely between existing systems and IMI.</p>
DG REGIO –	Unit REGIO.A.4 (<i>Information Technology</i>)

Stakeholders	Representatives
Directorate General for Regional Policy	This unit is in charge of the implementation of the eCohesion project (initiative aiming to set up the enablers required for the reduction of administration burden for beneficiaries of grants).
DG INFSO – Directorate General for Information Society and Media	Unit INFSO.H2 (<i>ICT for Government and Public Services</i>) The cooperation with INFSO is key given its role as the primary link between CIP pilots and the Commission.
DG ENTR – Directorate General for Enterprise and Industry	Unit ENTR.D3 (<i>ICT for Competitiveness and Industrial Innovation</i>) Its participation is essential given the importance of standards for the enablement of secure information exchange.
Organisations in Member States and	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 (e.g.: DG EMPL with its EESSI project) or interested in adopting eTrustEx.

1.8.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
ISA TIE Working Group	eTrustEx team members, Member States representatives, ISA unit members, ISA 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.

Event	Representatives	Frequency of meetings / absolute dates of meetings?
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..

1.8.7.3 Governance approach

First and foremost, the e-TrustEx project is an action of the ISA programme and therefore, it follows the ISA governance structure. The diagram below shows that this action will report back to the representatives of the Member States in the Trusted Information Exchange work-group under the “key enablers for interoperability” theme.

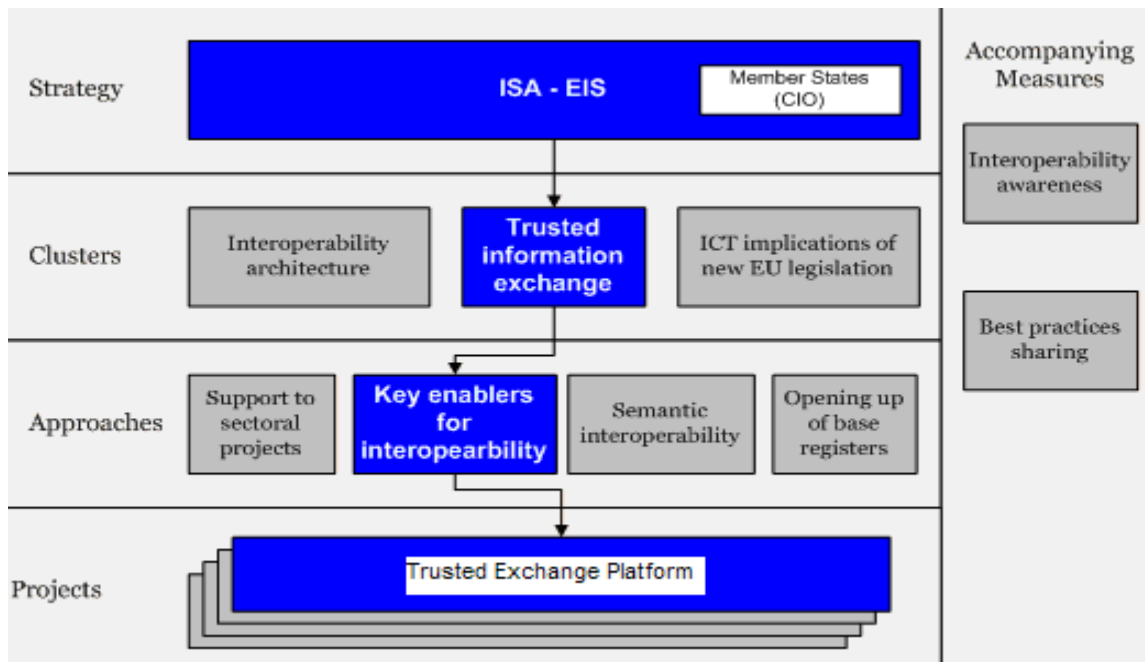


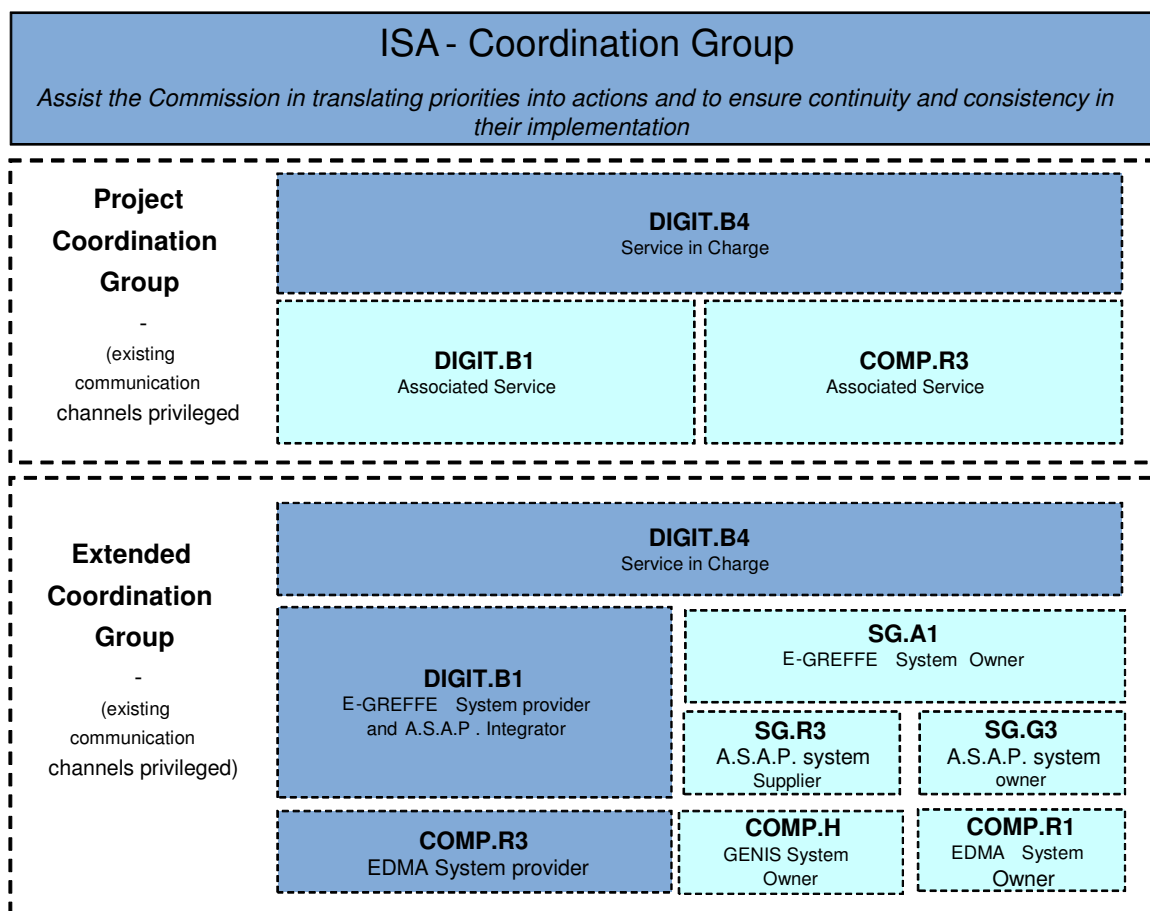
Figure: ISA Governance Structure

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). In particular for the integration of the pilots, structured coordination is required and described hereafter.

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 participating in the pilot. 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.

The governance/coordination structure of the Phase 1 and 2 pilots is summarized in the schema below, the same "model" will be extended to any new additional pilot in Phase 3 and 4.



1.8.8 TECHNICAL APPROACH

To achieve quick results for the European Commission and Member States, this initiative will firstly take a "Bottom-up" approach, through the execution of pilots in a specific sector. This will afterwards be complemented by a "Top-down" approach through the analysis of a number of architectural significant information exchange platforms to identify generic exchange needs and common features. The outputs and results of this initiative will be available in several phases:

- **The first phase** focuses on the analysis and implementation of the adaptation of the e-PRIOR platform to support the functional and architectural requirements necessary for the integration of a number of Commission back-end systems (pilots);
- **The second phase** introduces a parallelism between:
 - the definition of a robust architecture vision with an associated implementation roadmap that would make the platform the reference for cross sector and cross border information exchange integrated with the transport infrastructure created by the CIP pilots and
 - the implementation of pilots together with a first series of actions / additional features described in the roadmap that would prove the validity of its architecture in real / concrete situations.
- **Other phases** will be identified based on the roadmap mentioned above, in fact the Roadmap actions will be implemented in 3 "parts":
 - part 1 will be covered during the **second phase**;
 - part 2 during the **third phase** and;
 - part 3 during the **fourth phase**.

Like for Phase 1 and Phase 2 the implementation of new functionalities will be accompanied and validated by their use in the context of concrete business cases (pilots).

Some cases of cross-border information exchange have already been selected to be piloted or to serve as information source for an all-around Architecture Vision of the e-TrustEx platform.

The "pilots" are chosen on the basis of:

- the significance of their functional and not functional requirements (e.g.: security requirements, complexity of the "exchange"/"conversation", volumes and size of the exchanged documents etc...);
- the type of involved parties (e.g.: EU institutions, Member States administrations, etc.);
- the coverage of additional sectors / policy areas;
- the "political" importance of the document exchange to support.

The table below shows the pilots:

Pilots	Description
Exchange of legislative related	E-GREFFE is a workflow application supporting the decision making process of the EU Commission. It enables electronic management of all documents adopted by the Commission. After adoption, e-GREFFE

Pilots	Description
<p>documents (e-GREFFE of SG) [Phase I pilot and Phase II]</p>	<p>forwards electronic copies of these legislative documents to all relevant EU Institutions as well as to the permanent representations of the member states and to the national parliaments and local governments in the EU. These documents are PDF or Word documents, accompanied by metadata (in XML format).</p> <p>The exchanges of documents are complex and are performed to fulfil specific legal obligations. The email-centred business process is both time consuming and inefficient. Furthermore, delivery is not guaranteed or reliable (it cannot be used to discharge legal obligations). Other characteristics of email further limit its usefulness (e.g., the consequences of passing unencrypted data over public networks, size limitations, etc.). As a consequence, the assembly, dispatch and registered delivery of paper documents are mandatory.</p> <p>The discontinuation of email and the discontinuation of delivery of paper documents can be achieved through replacing the process by a solution taking full advantage of the possibilities offered by modern IT systems. Particularly, e-notification will bring significant added value to the e-GREFFE stakeholders.</p>
<p>Exchange of competition cases related documents (EDMA of DG COMP) [Phase I pilot, Phase II enhancements]</p>	<p>EDMA - Document Management System of DG COMP. Currently DG COMP systems exchange information and documents with various external entities (national competition authorities and ministries of EU member states, enterprises and others). The documents are exchanged in electronic format via e-mail or by post. A significant amount of documents is transferred by physical means like CDs, DVDs, faxes, pen drives, etc. Due to the security constraints the documents must be encrypted or electronically signed in some cases and delivered either personally or through special delivery.</p> <p>The email-centred business process has the same problems and limitations as described for the e-GREFFE pilot above. In these conditions the business processes cannot be integrated in a reliable and secure way, human intervention is required in almost all cases and interoperation with other IT services is not always possible.</p> <p>The exchange via encrypted email also overloads the Commission e-mail server, does not fulfil equal treatment to all 3rd parties and many external entities would not accept encrypted attachments due to corporate policies (scan the e-mails against viruses).</p>
<p>Exchange of legislative related documents (A.S.A.P. of SG)</p>	<p>The adoption of the Lisbon Treaty introduced an even greater involvement of national parliaments in the legislative process. National parliaments now have greater opportunities to be involved in the work of the EU. In this context, A.S.A.P. (Application de Suivi des Avis des Parlements nationaux) is an application developed and operated by the Secretariat General that</p>

Pilots	Description
[Phase II pilot]	<p>allows the management and the collection of National Parliaments advices on the legislative proposals of the European Commission. These legislative proposals are originated by the e-Greffe application, therefore the inclusion of A.S.A.P. In the pilots is the natural extension of the e-Greffe support since it would introduce a fully bi-directional exchange.</p> <p>The solution currently used by A.S.A.P. to receive advices from National Parliaments is the e-mail.</p> <p>A.S.A.P. would benefit from the integration with the Trusted Exchange Platform by replacing the existing e-mail document transfer in a secured and trusted way and by allowing an automated treatment of structured data.</p> <p>The National Parliaments may choose to send their advices through the GUI of the platform or, alternatively, using their own system through seamless integration.</p>
<p>Exchange of state aid related documents (GENIS – State Aid Notification Services –of DG COMP)</p> <p>[Phase II pilot]</p>	<p>The ISA action 1.11 "Interoperable and Generic Notification Services" (GENIS) by DG COMP aims at modernising and / or setting-up common services to support, in a generic and interoperable way, the State Aid notification processes (bi-directional data transmissions between Commission services and Member States Ministries). This action involves also Directorates General MARE and AGRI.</p> <p>GENIS would benefit from the integration with the Trusted Exchange Platform to ensure trust and data privacy, support of structured information exchange (several different "forms" are to be supported) and definition of message choreographies.</p> <p>In principle National Ministries will send their State Aid notifications using their own system connected to the platform. Alternatively, the use of the GUI of the platform might be evaluated to exchange the messages.</p>
<p>Exchanges in the context of eCohesion implementation of DG REGIO</p> <p>[Phase III pilot]</p>	<p>This initiative aims to set up the enablers required for the reduction of administration burden on the beneficiaries of e-Cohesion grants. The adoption of eTrustEx will allow the switch from paper to electronic data exchange between Beneficiaries with or without a Back Office (eTrustEx GUI) and Managing Authorities or Joint Technical Secretariats The data exchanges involving Intermediate Body and Other authorities at national level may also be digitised.</p> <p>NB: This pilot is relevant because the tool will be used for the first time at the level of local administrations.</p>

Pilots	Description
Exchange of legislative related documents (SG systems) [Phase III and IV pilots]	Secretariat General is evaluating the adoption of eTrustEx in the context of various exchange workflows with other EU and National bodies. On-going contacts are about the re-use in the context of the <i>IPEX</i> system (<i>InterParliamentary EU information eXchange</i> : platform for the mutual exchange of information between the national Parliaments and the European Parliament concerning issues related to the European Union, especially in light of the provisions of the Treaty of Lisbon).
Exchanges in the context of the Internal Market Directives (IMI of DG MARKT) [Phase III or IV pilots]	As mentioned in the "IMI" expansion strategy document, eTrustEx has been indicated as complementary to the IMI system. In fact IMI currently supports the exchange of data and information between end-users. In addition to these features, eTrustEx could provide Member States with the possibility to exchange information securely between existing systems and IMI.

In the context of the completion of the Architecture Vision, a number of contacts with Member States and DGs are on-going:

Contact with Member States

PEC (by the French Direction Général pour la Modernisation de l'Etat)

The PEC implements solutions for secured dematerialised exchanges within the French administration. The exchange module is currently partially operational and its usefulness in the exchanges within the French administration is recognised (e.g.: costs and time savings for exchange of supporting documents, reliability and traceability).

Malta (M.I.T.A.)

Contacts with representatives of the MALTA INFORMATION TECHNOLOGY AGENCY are on-going to understand requirements that can contribute to the definition of the Architecture Vision of the exchange platform.

EESSI of DG EMPL (Exchange of social security related documents):

The infrastructure put in place in the EESSI context is meant to address cross-border communication of structured information and interoperability of information systems. Several completely independent sectors (even though all related to social security) are covered by the current system (Sickness, Accidents at work and Occupational Diseases, Pensions, Unemployment Benefits and Family Benefits).

CIP Pilots:

When possible, e-TrustEx will re-use/ "integrate with" the building blocks coming from the CIP Large Scale Pilots. In this context, the Pan-European e-Delivery interface(s) used by the LSPs will be of great value and importance.

Various DGs of the European Commission:

The project team is in contact with several DGs (such as SG, MARE, MOVE, JUST, REGIO, MARKT, INFOS, ECFIN etc) and projects of the European Commission to understand their needs and existing solutions for trusted information exchange. Questionnaires are currently being collected and analysed.

Information has been exchanged with TAXUD which develops some major systems implementing data exchanges with Member States. Opportunities for collaboration are being investigated in the context of the project *COPIES*.

Contacts are on-going in the context of the *C.I.S.E.* (Common Information Sharing Environment) project for the surveillance of the EU maritime domain led by MARE.

DETAILS ON THE ACTION PHASES:

The various phases of this action will be realized in three sub-phases: inception, execution and operational sub-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.

Phase 1

The activities are grouped into 2 Work Packages (WPs).

- WP1: Services and features necessary to support the requirements identified for the e-GREFFE pilot, analysis and development of the common services, components and metadata;
- WP2: Services and features necessary to support the requirements identified for the EDMA pilot and the type of exchanges with DG COMP's external correspondents.

Identified objectives for WP1:

- Bundle Management;
- Web GUI for Inbox consultation;
- Technical Acknowledgement;
- Secure Transmission Channel;
- Administration Console for the Exchange Platform (scripts based);
- Possibility for a back-end external to the Commission to check its associated inbox (provision of "adaptor" with polling functionalities).

Identified objectives of WP2:

- Extended Bundle Management (up to 500 files in a Bundle);
- Transmission / reception of large files (up to 100 Mbytes);
- GUI for Inbox consultation/download/upload of large files (up to 100 Mbytes);
- Multicast mode;
- Secure Transmission Channel;
- Administration scripts for the Exchange Platform (User configuration);
- Multilingual GUI;
- Outbox consultation at GUI level.

Phase 2:

The activities can be seen as grouped into 4 Work Packages (WPs).

Scope of WP1 (Architectural Vision and Roadmap):

- Analysis of convergence with similar initiatives in Member States and within the Commission;
- Discussion with MS in ISA WG Trusted Information Exchange;
- Consultation of IRMs in the DGs;
- Coordination with on-going activities on convergence of transport infrastructure in the CIP pilots;
- Elaboration of a support and deployment model.

Identified objectives for WP1:

- Finalised Architecture Vision and;
- Finalised Architecture Roadmap;
- Input for updated proposal of ISA Work Programme (description of further phases after Phase 2).

Scope of WP2 (General Architecture enhancements):

- General Architecture enhancements of the e-TrustEx Platform (Part 1 of implementation of Architecture Roadmap: high priority actions, features common to the Phase 2 pilots).

Identified objectives for WP2:

- Review of Phase 1 developments, lessons learned and change requests management;
- Support of advanced non-repudiation features (receipt for delivered documents, use of eSignature);
- Enhancement of support of multi-recipients exchange;
- Open Source release of the e-TrustEx platform, to be re-used by Member States;
- Incorporation of additional "toolbox" services (e.g.: "outbox");
- Configurability features (e.g.: to reduce development required to support additional structured business documents);
- Admin Console.

Scope of WP3 (Services and features for the SG pilots):

- Additional Services and features necessary for the A.S.A.P. and eGrefe pilots still as of Part 1 of implementation of the Roadmap.

Identified objectives for WP3:

- Support of additional exchanges
 - eGrefe: eNotification (notification of approved legislation decisions to National Representation with digitally signed receipt)
 - A.S.A.P.: opinions / advices sent by National Parliaments associated to legislation proposal previously sent by eGrefe
- Documentation and assistance to configuration of Open Source version to be deployed in Member States Parliaments.

Scope of WP4 (Services and features for the DG COMP pilots):

- Additional Services and features necessary for the DG COMP systems: GENIS (new pilot) and EDMA (enhancement) still as of Part 1 of implementation of the Roadmap.

Identified objectives for WP4:

- Support of sensitive information requiring secure handling (e.g. encryption);
- Enhanced security features with regard to monitoring and logging;

- Enhancement of user management facilities (part of Admin Console features);
- Support of bi-directional exchanges in the context of State Aids notifications.

Phase 3

The activities can be seen as grouped into 4 Work Packages (WPs).

- *WP1*: Architecture Roadmap implementation – part 2
 - Enhance generalisation of the GUI associated to the platform;
 - Further enhancements on message exchange, non repudiation and security functionalities;
 - Further enhancements on modularity and configurability;
 - GUI for configuration / parameterisation of the platform with the objective implement new business exchanges without any development (e.g.: support of additional exchange choreographies);
 - Time Stamping on exchanged documents.
- *WP2*: Initial CIP Access Point implementation (including support of protocols such as ebXML);
- *WP3*: Detailed Study of possible convergence with EESSI platform of DG EMPL;
- *WP4*: Detailed Study of possible convergence / interoperability with Member States exchange platforms (such the French "PEC").

Phase 4

The activities can be seen as grouped into 4 Work Packages (WPs):

- *WP1*: Architecture Roadmap implementation – part 3
 - Management of business messages exchange priorities;
 - Enhance reliability of delivery in case of cold/hot restart of the platform (e.g.: in case of stop/restart of servers);
 - Enhanced Audit system (Admin Console);
 - Monitoring Tools (Admin Console);
 - Advanced features for preservation of documents (eSafe).
- *WP2*: Enhanced CIP Access Point implementation (including possible extensions to cover selected protocols implemented by Members States);
- *WP3*: Implementation of essential convergence with EESSI platform on selected features;
- *WP4*: Implementation of essential convergence (on specific feature) / interoperability with selected Member States exchange platforms.

Like for Phase 1 and 2, the implementation and the test of new features in Phase 3 and 4 will be done in parallel to the execution of pilots to prove of the validity of the architecture in real/concrete situations.

Methodology:

The project teams will use the RUP@EC methodology for software development 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.

1.8.9 COSTS AND MILESTONES

1.8.9.1 Breakdown of anticipated costs and related milestones

Phase:	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Phase 1 - Inception	Project Charter	300	ISA	Q2/2010	Q4/2010
Phase 1 - Execution	Development for e-GREFFE pilot and generic common services Development for EDMA pilot	1.200	ISA	Q4/2010	Q3/2011
Phase 1 - Operational	Phase 1	0	ISA	Q1/2011	Q4/2011
Phase 2 - Inception	Update of Project Charter + Executive Architectural Vision and Roadmap	200	ISA	Q1/2011	Q2/2011
Phase 2 - Execution	e-TrustEx available in Open Source Architecture Roadmap Implementation – Part 1 Phase 2 pilots Phase 2 - Execution report	1.200	ISA	Q3/2011	Q4/2012
Phase 2 - Operational	Roll-out to Operations (incremental roll-outs)	0	ISA	Q1/2012	Q4/2012

Phase 3 - Inception	Update of Project Charter	150	ISA	Q2/2012	Q2/2012
Phase 3 - Execution	Roadmap implementation – part 2 Initial CIP Access Point implementation	1.400	ISA	Q3/2012	Q4/2013
Phase 3 - Operational	Roll-out to Operations (various incremental roll-outs foreseen)	0	<i>funded by Policy DGs running the pilots</i>	Q4/2013	Q4/2014
Phase 4 - Inception	Update of Project Charter	100	ISA	Q2/2013	Q4/2013
Phase 4 - Execution	Roadmap implementation – part 3 Advanced CIP Access Point implementation	1.400	ISA	Q4/2013	Q4/2014
Phase 4 - Operational	Roll-out to Operations (incremental roll-outs)	0	<i>funded by Policy DGs running the pilots</i>	Q4/2014	Q4/2015
	Total	5.950			

1.8.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Phase 1 - Inception	300	300
	Phase 1 - Execution	1.200	1.200
2011	Phase 2 - Inception	200	200
	Phase 2 - Execution	400	400
2012	Phase 2 – Execution	800	
	Phase 3 – Inception	150	
	Phase 3 – Execution	400	
2013	Phase 3 – Execution	1.000	
	Phase 4 – Inception	100	

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
	Phase 4 – Execution	200	
2014	Phase 4 – Execution	1.200	

1.8.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
Project Charter approved by Restricted DIGIT Management Meeting of 10/06/2011		Available on request
IMI expansion Strategy	http://ec.europa.eu/internal_market/imi-net/docs/strategy_paper_en.pdf	
Presentations to TIE WG of 22/06/2011 (Charter + Executive Architecture Vision)		Available on request
Conclusions from TIE WG of 22/06/2011		Available on request
Digital Agenda	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:PDF	

1.9 SUPPORTING TOOLS FOR TSL AND E-SIGNATURE CREATION/VERIFICATION

1.9.1 Context

1.9.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG MARKT
Associated Services	DG DIGIT.B2; DG DIGIT A3; DG INFSO A.3

1.9.2 OBJECTIVES

The objective of the action is to allow Member States to render their public e-services more efficient and to pool resources by providing them with generic tools which would ensure interoperability for one of the key-enablers, i.e. e-signatures and allow for their automated creation and verification based on trusted lists as established under Decision 2009/767/EC. Namely, the tools would allow Member States to:

1. Establish their trusted lists, and check their conformity with Decision 2009/767/EC (and its updates) and to generate a conformant human readable form in PDF of their trusted lists. It is important to ensure a coherent and consistent implementation of Member States of trusted lists in practice as these would be the basis for information on and trust in e-signatures originating from other Member States;
2. Create and verify advanced e-signatures on the basis of the trusted lists. The tool would also take into account the common advanced e-signature reference format for cross-border use with e-Documents which would require additional efforts from Member States if they were to do it individually. Making this tool available would facilitate in practice convergence towards the use of an interoperable formats of e-signatures by Member States' public administrations.

1.9.3 SCOPE

The proposed action would be of a horizontal nature in support of Single Market. It would cover the creation at EU level of common shared solutions for the establishment and maintenance of trusted lists (TLs) in accordance with Decision 2009/767 and for the creation and TSL based verification of advanced e-signatures in accordance with possible advanced e-signature reference formats currently under discussion with MS in the framework of the Services Directive.

Even though Decision 2009/767/EC is limited to the implementation of the Services Directive, the Trusted Lists defined therein have the potential of becoming the de-facto standard when verifying qualified electronic signatures cross-border. This makes the proposed action a vehicle for facilitating also the take up of the Signature Directive 1999/903/EC in general.

The action would fall in the priority area of trusted information exchange in the EIS as it would support EU efforts on improving the interoperability of public key infrastructures, i.e. e-signatures.

The open and re-usable solution would allow a consistent and correct implementation of the trusted lists as well as facilitate the creation and verification of e-signatures used with documents and thereby enhance trust in and interoperability of the cross-border exchange of electronically signed documents.

1.9.4 PROBLEM/OPPORTUNITY STATEMENT

Under Decision 2009/767/EC Member States have to establish, maintain and publish in a secure manner trusted lists of certification service providers issuing qualified certificates to the public. This information has to be continuously updated in order to guarantee the reliability of the data used for the validation of e-signatures, in particular those coming from other Member States. As changes can be made to the Decision 2009/767/EC when necessary due to further technological developments, there is a need to ensure quick and consistent modifications in the national trusted lists and in the EC compiled list which in its turn would be facilitated via the use of a generic tool available for all parties relying on e-signatures.

First experiences with the trusted lists as implemented under Decision 2009/767/EC have shown that some deficiencies exist. These deficiencies are due to different technical interpretations of the Trust Lists, but also due to difficulties getting test certificates from other Member States and the fact that some certification service providers do not follow standards. This hinders the automatic processing of user certificates and creating the path to the Trusted List entries. It is therefore necessary to speed up convergence of trusted list implementations and thus facilitate the implementation of the Decision by the Member States by:

1. Collecting experiences in implementing the Decision;
2. Identifying misinterpretations in Trusted Lists provided by the Member States;
3. Establishing a set of test certificates to verify implementations;
4. Identifying where the noncompliance with certificate standards causes problems.

Linked to the cross-border use of e-signatures, there is a need to allow and enhance the use by public authorities of e-signatures with documents and also allow for an automated processing of the information contained in the trusted lists. The signature creation and verification tool would take into account the discussions that are currently ongoing with Member States on the reference format(s) for advanced e-signatures used with eDocuments in cross-border cases. Developing and testing such tools by each Member State could be time and resources consuming (as they do not yet exist even if a couple of Member States are starting to develop these). Therefore it would be justified to provide Member States with a common generic creation and verification tool as well as testing facilities (at a central level) which could ensure an efficient automated use of the trusted lists across EU, enhance cross-border use of electronically signed documents and create added value for public administrations relying on e-signatures.

1.9.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Public service developers in Member States	1. Enhance trust in and interoperability of e-signatures used at cross-border level for the completion of electronic public services through the use of a common solution shared by public administrations and, 2. Facilitate the governance of their trusted lists. Saving resources and increasing efficiency of provided e-services and compliance with EU legislation, including via a proper implementation of trusted lists. 3. Faster take up of trust lists at the point of single contacts (PSC).
CSPs	Identification of problems with their practices allowing them to correct these.
Businesses and citizens	As verification will be easily possible, trust and confidence and by this take-up of e-signatures will arise.

1.9.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
Services Directive, Actions related to e-signatures, E-Government	The Action provides for tools facilitating the compliance for Member States with their legal obligations under the Services Directive and beyond, for e-government and cross-border use of e-signatures in general.

1.9.7 ORGANISATIONAL APPROACH

1.9.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States' public administrations	Member States Administrations

1.9.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Workshops, expert groups, conferences on Services Directive and e-signatures	Member States, Industry	4-5 times per year

1.9.7.3 Governance approach

The open source software for Trusted Lists and e-signature creation and validation is uploaded in OSOR and assistance (regarding implementation) is provided by the developer to Member States using the software until 1 May 2012. The software will also be submitted to ETSI Plugtests and possible improvements will be made following Member States comments or needs and possible bugs detected during the testing.

1.9.8 TECHNICAL APPROACH

In order to allow Member States to establish and check the conformity of their trusted lists with the Decision 2009/767/EC and to generate the human readable form of the lists, some practical tools were made available by ETSI under a contract with the Commission. After the expiry of the contract (end December 2009), there is a need to update against the underlying standards and to make these tools available on a sustainable basis. This will be done by providing Member States the tools via OSOR or alternatively, by hosting these on a Commission website or elsewhere.

In order to detect and deal with deficiencies in the actual implementation of trusted lists, a quick desk research is necessary to analyse the available Trusted Lists against the Decision. In parallel Member States will be asked to share their first experiences with implementing the Trusted Lists. This input will be used to organise a workshop with the Trusted List implementers to identify the problems. An overall outcome of these actions will be a study identifying (i) errors in the Trusted Lists and (ii) possible amendments to the decision 2009/767/EC, or in the related ETSI standards. Moreover, a number of additional actions will be taken to deal with sample certificates and certification paths of CSPs (incl. informational repository of these and its governance, extensions proposed to allow CSPs to publish references to samples or put sample certificates on a service level granularity in a non-critical TSL extension). A common mark-up language for the provision of sample data integrated into TSLs will ease automated gathering of realistic test vectors for PKI and TSL implementations. A software tool, to conveniently extract the sample data into a container (e.g. zip file) will also be envisaged. Further an open format allowing implementers to report back test results easily will be proposed.

An additional study will be carried out based on the sample certificates and certificate chains to assess for which CSPs automatic generation of certificate paths is possible, if a XAdES (CAdeS, PAdES) BES/EPES signature just holds the end user certificate. This study together with the test sets facilitates the integration of the Trust Lists into signature verification platforms as implementers have an overview where standards are followed and where alternative processing needs to take place.

An e-signature creation and verification tool relying on the trusted lists and implementing the common reference format for advanced e-signatures will be developed at EU level and made available for Member States to be used nationally. Some initial assistance may be necessary to help Member States to integrate the tool into their e-Government systems but further maintenance of these tools would fall on Member States.

In order to allow the Commission to sign the EC compiled list, support for signing and verification will be integrated into the Electronic Signature Service Infrastructure of the Commission to allow the use of various certificates.

1.9.9 COSTS AND MILESTONES

1.9.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Execution	Delivery of generic tools in support of trusted lists management, including maintenance.	100	ISA	Q4/2010	Q3/2012
Execution	Delivery of the generic tool for e-signature creation and verification based on a possible common reference format for advanced electronic signatures; testing of the tools.	500	ISA	Q4/2010	Q3/2011
Execution	Delivery and initial assistance to Member States for the installation of the e-signature creation and verification tool.	100	ISA	Q3/2011	Q3/2012
Execution	a) TSL quick desk	80	ISA	Q2/2011	Q1/2012

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	research report and study on MS outreach & report; b) Workshop and its report.				
Execution	a) unsolicited sample certificate repository and its governance process definition; b) standardization and establishment of a solicited sample certificate repository.	90	ISA	Q2/2011	Q1/2012
Execution	Final Study & Report	40	ISA	Q3/2011	Q1/2012
Execution	Update of the generic tool for e-signature creation and verification based on a possible common reference format for advanced electronic signatures ; testing of the tools.	300	ISA	Q2/2012	Q1/2013
	Total	1.280			

1.9.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Execution	600	552
2011	Execution	310	380 ¹⁵
2012		300	

¹⁵ An additional 70kEUR was granted to the action during the execution of the 2011 revision to undertake the following tasks: a.) List of Trusted List signature applications/service, b.) ISA-CA PKI evaluation/integration for signing the EU List of Trusted List, c.) Support for DG MARKET's OSS project for AdES

2013			
2014			
2015			

1.9.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
Decision 2009/767/EC setting out measures facilitating the use of procedures by electronic means through the 'points of single contact' under Directive 2006/123/EC of the European Parliament and of the Council on services in the internal market amended by Commission Decision 2010/425/EU	OJ L 274 of 20.10.2009, replaced by Corrigendum in OJ L 299 of 14.11.2009, OJ L 199 of 31.07.2010	
Decision 2011/130/EU establishing minimum requirements for the cross-border processing of documents signed electronically by competent authorities under Directive 2006/123/EC of the European Parliament and of the Council on services in the internal market	OJ L 53 of 26.02.2011	
Action Plan on e-signatures and e-identification to facilitate the provision of cross border public services in the Single Market	COM(2008) 798 final	
Directive 1999/93/EC on a Community framework		

Description	Reference link	Attached document
for electronic signatures		

1.10 INTERNAL MARKET INFORMATION (IMI) SYSTEM

1.10.1 Context

1.10.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG MARKET
Associated Services	DG DIGIT (as system supplier), DG EMPL (pilot for posting of workers), DG SANCO (awaiting MS agreement on implementation details for patients' rights) DG ECFIN (on-going discussions on possible use of IMI for cash in transit)

1.10.2 OBJECTIVES

The objectives of the proposed action are:

1. to realise the full potential of the IMI application as a generic tool-kit for administrative cooperation across a wide spectrum of community policies;
2. to create new policy areas in the system;
3. to deliver generic improvements to the operational IMI application for the current users, namely more than 6500 competent authorities in 30 EEA Member States who use the application for two policy areas and are currently piloting a third area.

IMI meets the objectives of the ISA programme as it:

- facilitates the free and unimpeded movement, establishment and employment of citizens in the Member States by enabling competent authorities to take informed decisions quickly;
- facilitates cross-border and cross-sectoral interaction between European public administrations via a secure internet application;
- is demand driven: it takes account of the needs of local and regional administrations (currently more than 6500 authorities at local, regional and national level throughout the EEA are using IMI to exchange information);
- reduces administrative burdens and costs (IMI is designed to integrate smoothly in a typical office environment for a public administration since it requires only internet access and a browser to be used) and allows new forms of administrative cooperation;

- is a fully multi-lingual application (all official EU languages);
- adheres to the principles of security, privacy and protection of personal data.

1.10.3 SCOPE

IMI is a generic, customisable, administrative cooperation platform. It provides public authorities in the 27 Member States and 3 EFTA countries with a fast and secure communication channel for cross-border information exchange based on community legislation. IMI overcomes barriers due to different languages and different administrative structures.

The European Commission offers IMI as a service to Member States, developing the application and hosting the computing infrastructure.

IMI currently supports two sectors (the Directive on the Recognition of Professional Qualifications and the Services Directive) and in May 2011, a pilot project was launched to support the Directive on Posting of Workers. An additional policy area will be introduced for the Directive on cross-border health care adopted in March 2011, which foresees that IMI will be used to exchange information about health professionals' right to practice. Furthermore, the SOLVIT IT application will be integrated in IMI, reusing part of IMI functionality.

Further expansion of IMI is foreseen for the coming years, as described in the Commission Communication on the future expansion of IMI, adopted in February 2011. Moreover, in August 2011 the Commission submitted a proposal for an IMI Regulation to the European Parliament and Council, to ensure a high level of data protection and a flexible instrument for expansion of IMI to other areas of administrative cooperation.

This action addresses the "trusted information exchange" priority area from the European Interoperability Strategy (EIS). The scope of the action covers improvements to the services currently offered by IMI and the further development of IMI towards the goal of providing a full administrative cooperation tool-kit.

1.10.4 PROBLEM/OPPORTUNITY STATEMENT

IMI is a flexible administrative cooperation platform, supporting European public administrations that need to exchange information in order to facilitate the free and unimpeded movement, establishment and employment of citizens throughout the Single Market.

In order to make a real success story of IMI, it is essential that the further development of the system is driven by the needs of the current and the future users. The system has to be easy to use, without requiring too much training, if any at all, and it should enable the users to perform the widest possible range of their daily, weekly or monthly tasks in relation to EU law. As many authorities are responsible for more than one policy area, further expansion of IMI to these other policy areas would generate important synergies.

A number of the developments under this action were part of the recommendations of the original external study commissioned jointly by DG DIGIT and DG MARKT in 2006 prior to beginning

development of IMI. These remaining developments suggested by the study would make it easier to extend IMI to cover a wide spectrum of community policies.

Other improvements have been raised by the users of IMI over the past three years. They are generic requirements which are not specific to a single policy area supported by IMI but are likely to deliver benefits to future users of IMI across a range of policy areas.

Furthermore, in February 2011, the Commission adopted a Communication on the future strategy for the Internal Market Information system. It describes unlocking the full potential of IMI by expanding it to support a wide range of policy areas. It defines the criteria for expansion and it proposes the extension of IMI to provide an administrative cooperation "tool-kit", which would cover a broader range of administrative activities, supporting the expansion to new sectors. A study is currently underway to examine the soundness of the current architecture and propose a suitable technical approach for the envisaged extension.

On the basis of an inventory of requirements from these three sources and with any external assistance that may be needed to deliver a project plan that has a sufficiently broad view and takes full account of the real user needs over a longer period, priorities and working methods will be determined to establish an updated project charter by Q1 2012.

1.10.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Citizens and enterprises	IMI enables administrations to communicate faster and more effectively across borders. As a result many problems experienced by citizens and businesses due to delays and misunderstandings can be avoided. This will enable European citizens and enterprises to fully benefit from their rights in the single market.
Member States' Public Administrations	The proposed improvements are based on experience and reflect the demands of the current user community and stakeholders. They will increase effectiveness of the tool in the following areas: identification of interlocutors in other Member States, handling of information requests, and improved security through the introduction of ECAS. New functionality will provide support for a wider range of cooperation via a single interface and avoid system proliferation.
European Commission Services	Re-using an existing IT tool will result in important savings on human and financial resources. A wider spread use of IT support for administrative cooperation will result in better implementation of EU law.

1.10.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
Internal Market: Professional qualifications directive	IMI facilitates the exchange of information concerning the qualifications of professionals from other member states.
Internal Market: Services Directive	IMI facilitates the exchange of information concerning cross-border service provision.
Employment: Posting of Workers Directive	A pilot project allows employment authorities to exchange information concerning posted workers.
Health and Consumers: Patient Rights Directive	This directive on cross-border health care, adopted in March 2011, foresees that IMI will be used to exchange information about health professionals' right to practice.

1.10.7 ORGANISATIONAL APPROACH

1.10.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	IMI working group of the Internal Market Advisory Committee (IMAC) Group of Coordinators for the recognition of Professional Qualifications Services Directive expert group on Administrative Cooperation
Public Administrations/ Competent Authorities; end users	EU MS Administration - National IMI Coordinator EU MS Administration – Super Delegated IMI Coordinator
EU Commission	DG MARKT (System Owner, service usage) DIGIT (DIGIT B4 as system supplier) DGT (as translation supplier) DG EMPL (pilot service usage) DG SANCO (future service usage)

1.10.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Annual Report	All	Annual
Conferences	All	Annual or every second year
IMAC/IMI Working group meetings	IMI working group of the Internal Market Advisory Committee (IMAC) / EU MS Administration - National IMI Coordinator Representatives of EU policy areas are invited to present progress and discuss foreseen activities.	Quarterly
Coordinator training	EU MS Administration - National IMI Coordinator EU MS Administration – Super Delegated IMI Coordinator	As required (2 or 3 per year)
Cluster training And support for local awareness and training events	EU MS Administration – Competent Authorities	As required (approximately 10 per year)

1.10.7.3 Governance approach

The existing steering committee, chaired by DG MARKT, will continue to guide the project. The committee will be expanded to include representatives for other policy areas when they decide to use IMI.

The committee will:

- Decide on the project charter;
- Establish a long term strategy for the IMI system;
- Take decisions in line with the strategy;
- Set priorities for further developments and improvements to the system based on the strategy and the requirements and priorities expressed by Member State stakeholders;
- Supervise timely delivery and quality of new developments delivered by the system developer.

DG MARKT has established a dedicated unit responsible for the ongoing development and operation of IMI, the liaison with MS stakeholders and further IMI policy development. This team produces the functional specifications for the system, ensuring that the features developed meet the stakeholders' expectations. The unit carries out quality assurance on behalf of the user community and provides a help desk facility for Member States. It is also responsible for developing training material, for system data administration and for managing the language aspects of the application.

1.10.8 TECHNICAL APPROACH

IMI is a web-based application accessible via standard browsers, imposing no specific hardware or software requirements on clients. It has a classical multi-tier architecture and in the course of this action, anticipated interfaces include MT@EC for machine translation, EU Pilot for case transfer, Your Europe for content syndication and ECAS for authentication. An on-going study is evaluating the introduction of a business process approach to improve the development process and facilitate interaction with other systems. In the context of interacting with other systems, e-Trustex will be considered as a potential communication platform.

Inception Phase

Since the IMI tool is already provided as a service that was set up and developed to serve multiple policy areas, further developments needed will not require a feasibility study. Instead, the project charter will be refined once the various elements for further development and improvement have been determined, and the business requirements for each of these elements have been elaborated. An estimate of time and costs for each of the elements will be determined by the system developer. On this basis the steering committee will define the development iterations based on the priorities it has determined and the anticipated costs and timing provided by the system developer.

Execution Phase

The execution phase of the project will be carried out in a number of iterations which will be defined in the project charter. This will ensure that development can be handled in manageable work packages and that there will be a regular schedule of deliverables for end-users. The precise timing and content of these iterations will be defined in the project charter, to be delivered in Q1 2012.

Corrective and adaptive maintenance and technical support will be detailed and estimated on the basis of a rolling maintenance and technical support work programme to be submitted at the same time as the project charter.

Operational phase

Operation of the service has already started and therefore the operational phase runs in parallel with the execution phase for new developments.

The activities and deliverables described in this proposal are divided into three phases. Work included in the initial project charter and the rolling maintenance and technical support programme produced in Q2 2010 is considered as Phase 1. Further improvements to IMI, which are mainly related to the extension of IMI to new sectors, are included in an extended project charter produced in Q2 2011, these activities along with continued activities relating to the provision of IMI are considered as Phase 2. Phase 3 relates to further development to be covered by a revised project charter in Q1 2012.

Phase 1 (ISA Work programme 2010) addressed improvements to IMI in response to user demand Execution will include improvements to:

- Search for a Competent Authority;
- Split, link and copy information requests;
- Identity and access management;
- Question set generator;
- Multilingual system management;
- Provision of IMI will cover application maintenance and support of the IMI system (including online application help and selection and implementation of an automated testing tool).

Phase 2 (ISA Work programme 2011) mainly addresses improvements to support the extension of IMI to new sectors

Execution will cover the following:

- Analysis of requirements for common components of the administrative cooperation "tool-kit" and recommendations for solutions, including possible integration of tools already available within the Commission;
- Technical analysis of work required to develop a common workflow engine ;
- Technical analysis of work required to develop a dynamic screen engine;
- Implementation of ECAS to replace IMI proprietary authentication method;
- Begin implementation of "Google-like" text search tool based on the recommendations of the study conducted in Phase 1;
- Begin the development of the first elements of the "tool-kit".

End-user requested improvements

- Request management (attachments, improvements to partial reply feature);
- Request lists (display and search, improved monitoring view);

- Authority management (enhance standard email with rich text, attachments, possibility to email all or selected users of an authority);
- Provision of IMI will cover continued application maintenance and support of the IMI system (including simplified implementation of translation module to include sorting algorithms and ongoing improvement to application user interface "look and feel").

Phase 3 (ISA Work programme 2012) will address the development of new tools in IMI, generic improvements of benefit to any sector and further extensibility improvements.

Execution will include the following:

- Development of a new generic notification workflow with customisable features providing flexibility to meet the needs of different policy areas and different implementing procedures;
- The question set generator, which supports the existing information request workflow, will be adapted to support multiple workflows including the new notification;
- A generic information repository will be developed, capable of storing content assets for different policy areas;
- Work on existing tools will be undertaken to improve extensibility, maintainability and performance;
- Further improvements to existing functionality in response to user demand;
- Provision of IMI will cover continued application maintenance and support of the IMI system (including further improvements to the user interface).

1.10.9 COSTS AND MILESTONES

1.10.9.1 Breakdown of anticipated costs and related milestones

Phase	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Phase 1: Improvements to IMI in response to user demand					
Inception	Initial Project Charter	(0)	MARKT	Q1/2010	Q2/2010
Execution	Improvements to key components of IMI	550	ISA	Q3/2010	Q2/2011
Execution	Provision and improvement (maintenance and technical support)	450	ISA	Q3/2010	Q2/2011

Phase	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Hosting	237	MARKT	Q1 2010	Q4 2010
Operational	Promotion and Training	200	MARKT	Q1 2010	Q4 2010
Phase 2: Improvements required to support extension of IMI to new sectors					
Inception	Extended Project Charter	0	MARKT	Q4 2010	Q1 2011
Execution	Business and technical analyses concerning the extension of IMI to new sectors. Further end-user requested improvements	550	ISA	Q2 2011	Q1 2012
Execution	Provision and improvement (maintenance and technical support)	450	ISA	Q3 2011	Q1 2012
Operational	Hosting	237	MARKT	Q1 2011	Q4 2011
Operational	Promotion and Training	200	MARKT	Q1 2011	Q4 2011
Phase 3: Improvements and extension of IMI functionality					
Inception	Extended Project Charter	0	MARKT	Q4 2011	Q1 2012
Execution	Development of a new workflow, and an information repository, and extensibility and end user requested improvements	700	ISA	Q2 2012	Q1 2013
Execution	Provision and improvement (maintenance and technical support)	300	ISA	Q2 2012	Q1 2013
Operational	Hosting	237	MARKT	Q1 2012	Q4 2012
Operational	Promotion and Training	200	MARKT	Q1 2012	Q4 2012
	Total	4.311			

1.10.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Execution	1.000	1.000
2011	Execution	1.000	1.000
2012	Execution	1.000	
2013			
2014			
2015			

1.10.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
Initial IMI study		IMI inception study
IMI Vision for Version 3		Vision Document IMI Version 3
IMI Strategy Communication 'Better governance of the Single Market through greater administrative cooperation: A strategy for expanding and developing the Internal Market Information System	COM (2011) 75 final	
Commission Proposal for a regulation 'on administrative cooperation through the Internal Market Information System ('the IMI Regulation')'	COM (2011) 522 final	

1.11 INTEROPERABLE AND GENERIC NOTIFICATION SERVICES (GENIS)

1.11.1 Context

1.11.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable Generic Tools
Service in charge	COMP
Associated Services	AGRI, MARE, SG

1.11.2 OBJECTIVES

The objective of the GENIS ISA action is to identify and implement/adapt/develop reusable building blocks (existing or new ones – see 1.1.3 Scope) of cross-sector interest, necessary to develop the GENIS Information System (the specific IS development is out of scope of ISA). The aim of the GENIS Information System is 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 (see: Project Charter).

The reusable building blocks tackled in this action (see 1.1.3 Scope) as well as the GENIS Information System to be developed on them, address the domain Government-to-Government (G2G) and the following principles of the European Interoperability Framework:

- Security and privacy,
- Multilingualism,
- Administrative simplification,
- Transparency,
- Preservation of information,
- Openness,
- Reusability,
- Effectiveness and efficiency.

Specifically, GENIS main goals will be:

- Define an IT architecture based on reuse of building blocks which will simplify (in terms of cost and time) the development of information systems, their maintenance and evolution (more flexibility to cope with legislation change);
- Ease the management (creation, change, versioning, maintenance) of schemas for structured data exchange;

- Support the exchange of structured data and non-structured data between Member States and the Commission, via multilingual web portal as well as via web-services for system-to-system data exchange (semantic interoperability ensured);
- Use eTrustEx as a reliable and trusted information exchange channel;
- Increase transparency by sharing case/project data between Commission and Member States;

1.11.3 SCOPE

The overall business scope of GENIS is to cover the exchange of structured and unstructured data and to share case/project data between Member States and Commission within the domain of State Aid Notification Process (applicable to any business domain with similar data exchange needs between administrations).

On the technical side, the scope of this ISA action is, firstly: identify reusable cross-sector building blocks (services and components) required to build GENIS Information System. And secondly, integrate/adapt existing components or develop new reusable building blocks. Putting together these reusable building blocks to develop the GENIS Information System is out-of-scope of this ISA action.

The execution of GENIS is foreseen in iterations, the scope of which is defined in the table below.

Iteration	Scope Business	Scope Technical
Execution - Iteration 1	<ul style="list-style-type: none"> • Enable the efficient management of State Aid notification schemas (currently more than 40) that must be used by Member States to notify State Aid measures to the Commission, as defined in EU legislation. • Provide means for the Member State administrations to select, encode, validate and submit/transmit (in a trusted and secure way) State Aid notifications to the Commission. • Provide workflow and de-centralised user management for the Member State administrations to manage and validate the State Aid notifications. 	<p>Reusable building blocks (ISA scope):</p> <ul style="list-style-type: none"> • PORTAL: Main system integration component and User Interface for the Member States. (New) • FORMS: Repository and management tool for notification schemas. (New) • METADATA: Repository and management tool (basic) for domain semantics: metadata, dictionaries, translations. (Reuse/new) • MULTILINGUISM: Component to support (basic) multilinguism (management of translations) of User Interface, form schemas and domain vocabulary (Reuse/new) • eTrustEx: Component for the trusted transmission of data (Reuse, eTrustEx)

Iteration	Scope Business	Scope Technical
		<p>action).</p> <ul style="list-style-type: none"> • ECAS: Authentication service (Reuse, no adaptations necessary). <p>Out of ISA scope (admin budget for common projects will be requested):</p> <ul style="list-style-type: none"> • Build and put in production the GENIS IS v1.0 on the building blocks of this iteration, incl. parameterizations, adaptations etc.
<p>Execution - Iteration 2</p>	<ul style="list-style-type: none"> • Implement interoperable notification service (system-to-system). • Management of the communications between the Commission and the Member States within the State Aid case lifecycle. 	<p>Reusable building blocks (ISA scope):</p> <ul style="list-style-type: none"> • Complete/enhance components from Iteration 1: <ul style="list-style-type: none"> ○ PORTAL: Add necessary functionality to integrate the interoperable structured data exchange service and the shared case/project repository. ○ FORMS: Implement generic web-services based on notification schemas to enable system-to-system exchange. ○ METADATA: Enhance to provide necessary semantic interoperability to support the above referred interoperability. ○ MULTILINGUISM: improved translation support. • SHARED CASE REPOSITORY: Component to share case/project data between the Member States and the Commission (New). • eTrustEx: Component for the trusted transmission of data (Reuse, eTrustEx action). <p>Out of ISA scope (admin budget for common projects will be requested):</p> <ul style="list-style-type: none"> • Build and put in production the GENIS

Iteration	Scope Business	Scope Technical
		IS v2.0 based on the building blocks of this iteration, incl. parameterizations, adaptations etc.
Execution - Iteration 3 (Non-ISA)	All State Aid related communication between Commission and the Member States, from Notification to Monitoring and Publishing (see Project Charter) via a single entry point GENIS.	Out of ISA scope (admin budget for common projects will be requested): <ul style="list-style-type: none"> Integrate the State Aid reporting tool (SARI) and the Online State Aid Scoreboard in GENIS IS (GENIS IS v3.0).

1.11.4 PROBLEM/OPPORTUNITY STATEMENT

Currently, the IT support to the State Aid Notification Process faces a number of problems, e.g.:

- There is no unified / formalised description of the State Aid Notification processes involving COMP, AGRI, MARE and the Member States;
- Existing systems do not cover all data exchange needs. In particular there are serious limitations in the implementation of notification forms, the management of communications and underlying workflows between Commission and Member States;
- Existing systems are not flexible enough to evolve or be adapted easily to cope with legislation change that implies changes of notification schemas;
- New developments and evolution under the current architecture are slow, risky and expensive;
- Interoperability with the Member States (system-to-system exchange) is not provided by existing systems.

The problems lead to a set of important opportunities for this project:

- Carry out a business analysis / modelling of the State Aid Notification Process (COMP, AGRI, MARE) to better understand the business context, process boundaries and interactions with other processes;
- Design a new architecture for State Aid Notification Process based on reuse of building blocks (services, components) to enable the development of IT solutions to better cover the business needs, which are more efficient, flexible and scalable to cope with new requirements that might result from legislation changes;
- Identify existing or develop new reusable building blocks to support the new architecture to cover the exchange of structured and unstructured data of the State Aid notification process;
- Promote semantic interoperability with the Member States in EU policy domains (e.g. the State Aid domain);

- Improve productivity and data quality by providing better interfaces for the Member States to exchange data with the Commission – specially implement interoperability (system-to-system exchange).

1.11.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Administrations in general	<p>Reuse, reducing IT costs.</p> <p>The outcome of the GENIS ISA action:</p> <ul style="list-style-type: none"> - IT architecture based on reuse of building blocks (services and components); - new/adapted reusable building blocks: Portal as integration component to provide data exchange services (UI / web services), Schema management, Semantic assets management, Translation management, Shared case/project repository; together with existing reusable building blocks (eTrustEx, ECAS, etc); <p>will be available to Member States administrations and Commission services to reuse / integrate in information systems in any domain covering similar data exchange processes between administrations.</p>
Member States and European Commission	<p>Security and privacy, preservation of information</p> <p>The GENIS Information system will guarantee a high level of trust and data preservation by using eTrustEx as data exchange channel.</p>
Member States	<p>Administrative simplification, effectiveness and efficiency, data quality</p> <p>The GENIS Information System will increase efficiency and data quality by implementing state-of-the-art user interface and interoperability (system-to-system) for the pre-notification and notification of State Aid measures by the Member States to the Commission.</p>
European Commission	<p>Efficient IT development and evolution, flexibility, scalability, adaptability to legislation change</p> <p>The GENIS Information System will be flexible, scalable and adaptable by</p> <ul style="list-style-type: none"> - Being developed on a service and component oriented IT architecture); - Using a schema management component to efficiently manage notification schemas (de-coupling schema management from the IS implementing generic notification forms and web services, allowing management and evolution of schemas by business).

Beneficiaries	Anticipated benefits
Member States and European Commission	<p>Transparency, openness</p> <p>The GENIS Information System will improve the transparency and openness of data exchange between Commission and Member States by developing/adapting and using a component to share case/project-related data.</p> <p>GENIS will contribute to semantic interoperability by implementing and maintaining a State Aid Notification Process' semantic repository (metadata, dictionaries, translations) accessible and re-usable for Commission Services and for the Member States.</p>
Member States and European Commission	<p>Data quality</p> <p>The GENIS Information will improve data quality and integrity, and preservation of information by implementing state-of-the-art user interface and interoperability to back-office and by using reliable and trusted data transfer.</p>

1.11.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
State Aid control under Article 107 of the Treaty on the Functioning of the European Union (TFEU)	GENIS, the system proposed in this action, is a key element to implement the State Aids control in the European Union.
Commissioner Almunia priority project to streamline State Aid control procedures	The changes envisaged by the Cabinet Almunia to streamline / simplify the State Aid procedures will require an Information System architecture better aligned with business requirements and flexible in order to adapt to possible legislation changes (which imply changes of the notification schemas).

1.11.7 ORGANISATIONAL APPROACH

1.11.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
DG COMP	Humbert Drabbe (Director of Directorate H in charge of State Aid). Humbert Drabbe is the GENIS Project Owner in representation of State Aid network (all the directorates and units dealing with State Aid at DG COMP) Ulrich Diez, Business Project manager from unit COMP.H.3 Manuel Perez-Espín as System Provider (HoU of COMP R.3, IT Unit at DG COMP).
DG AGRI	Susana MARAZUELA AZPIROZ (HoU of AGRI.DDG4.M.2, unit in charge of State Aid in DG AGRI) delegates in Gabriella Sestini.
DG MARE	Friedrich Wieland (HoU of MARE.F.4, unit in charge of State Aid in DG MARE) delegates in Maria VLADIMIROVA WALFRIDSON.
SG	Dorthe Christensen as representative of the Unit in charge of the Application of EU Law (SG.DSG2.C.4).
Member States	Representatives from the different Member states in the State Aid working group.

1.11.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
State Aid working group	Representatives from all the Member States	One or twice per year

Also as part of the communication plan between the operational units and the Member States there are some groups of interest created in CIRCA and acting as a network.

1.11.7.3 Governance approach

This action will respect the general ISA Governance: under the supervision of the ISA Coordination Group and integrated inside the cluster "Trusted Information Exchange".

The GENIS action will be part of the ISA Working Group: "Trusted Information Exchange" For this first phase there will be different working groups or committees to coordinate the diverse aspects of this project phase.

The governance for this project will consist of:

Working group or entity	Composition	Responsibilities
ISA Coordination Group	Representatives from the Member States and the Commission	Monitor and supervise the development of the different ISA actions.
Project Steering Committee	<p>Director from Service in Charge: DG COMP</p> <p>Directors from Associated Services: DG AGRI, DG MARE, and SG</p> <p>Head of Unit from system provider: DG COMP.R3</p>	<p>Controls and steers of the project, high-level management e.g. change control and conflict resolution.</p> <p>Project Ownership is delegated in a Project Manager, and the system provider delegates in an IT Project Manager.</p>
Project Manager	Project Ownership delegates in the Project Manager	<p>Represents and assists the Project Owner and the Steering Committee at operational level, manages business aspects of the project.</p> <p>Business related reporting.</p> <p>Organises, canalises and compiles the feedback from the business side to the IT.</p> <p>Organises, delegates, compiles the results, and manages the user tests.</p> <p>Organises, canalises and compiles the feedback from the workshops with the</p>

Working group or entity	Composition	Responsibilities
		Member States.
IT Project Manager	System provider delegates in IT Project Manager	<p>Responsible for overall IT portfolio, resources management and team's coordination (interaction of the project team with the other IT teams).</p> <p>Mid-level management, monitoring and reporting.</p> <p>Assumes responsibility for project deliverables. Proposes and executes the project management plans as approved by the Project Steering Committee.</p>
Users Committee	<p>Users from different units dealing with State Aid at DG COMP</p> <p>Users from the units dealing with State Aid in DG AGRI, DG MARE and SG</p> <p>Users from the Public Administrations (at national and regional level) involved in State Aid from the 27 Member States</p>	<p>Formulate user requirements and provide business feedback.</p> <p>Provide support to the Business Project Manager for carrying out user tests.</p>
Technology Committee	<p>System provider: DG COMP.R3</p> <p>Technological Partner DIGIT.B4</p>	<p>This working group will define, from a technical point of view, the reusable components or common services required for the State Aid Notification Process.</p> <p>Taking into account the current status in architectures, components and services existing nowadays in the Commission.</p>

1.11.8 TECHNICAL APPROACH

The GENIS IS architecture is based on

- Existing reusable components and services – eTrustEx, ECAS;
- New building blocks (e.g. Schema management, see 1.1.3 Scope and Annexes I and II) which will be developed (rather: adaptations of existing Open source components if possible), and made available under the most appropriate Open Source licensing to Member State administrations and Commission services.

The execution phase will be organised in iterations. At the end of the each iteration generic and reusable building blocks (as described in 1.1.3 Scope and Annexes I and II) will be made available for reuse. A version of GENIS IS will be fully functional. In order to manage risks, the first iteration building blocks will fulfil basic functionality to be completed in the subsequent iteration.

The work will be structured in the following way:

Iteration 0 (ongoing, business process and architecture analysis):

1. (2011) identify the requirements/features of the building blocks necessary to build GENIS IS. This identification will be done in the IS Architecture document designed to cope with the business needs of the State Aid Notification Process derived from the Business Architecture
2. (2011) Analysis of existing components that could be part of GENIS architecture and gap analysis to define which new building blocks are needed for GENIS. There could be existing components in the Commission or open source components Decide whether the components are:
 - Fully reusable, and they will be part of GENIS
 - Partially reusable, and they will require adaptations/development

Iteration 1

3. (2012) Develop new building blocks and adapt existing ones for the Iteration I
 - Functional analysis
 - Develop prototypes and proofs of concept
 - Implement new building blocks / adapt existing ones; make them available.
4. (2013) Assemble building blocks in order to build GENIS IS v1.0

Iteration 2

5. (2013) Develop new building blocks for Iteration II and complete the blocks already developed under Iteration I
 - Functional analysis
 - Develop prototypes and proofs of concept
 - Implement new building blocks and adapt existing ones
6. (2014) Assemble building blocks in order to build GENIS IS v2.0

Iteration 3

- 7. (2014) Assemble building blocks in order to build GENIS IS v3.0 – covering the entire State Aid notification processes under a single point of exchange Commission – Member States.

For the new building blocks that will have to be developed the main strategy will be try to find a similar open source component, make the adaptations required to cope with the requirements, and make them available under the most appropriate Open Source licensing.

For a detailed description of the technical and architectural approach and its relation with the business processes please refer to Annex I: "GENIS architecture approach.ppt"

For a detailed description (High level needs, features and requirements) of the building blocks required to build the GENIS Information System please refer to Annex II: "GENIS Building blocks.doc"

1.11.9 COSTS AND MILESTONES

1.11.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Project Charter	410	ISA	Q2/2010	Q4/2010
Execution - Iteration 0	Execution report: Business Architecture, IS Architecture.	350	ISA	Q1/2011	Q2/2012
Execution - Iteration I - ISA	Reusable building blocks (see 1.1.3 Scope, Annexes I and II): func. analysis, prototyping, development and adaptation of building blocks. Execution Report.	600	ISA	Q2/2012	Q2/2013
Execution	Integration building	160	Admin	Q3/2013	Q4/2013

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
- Iteration 1 – non ISA	blocks. Implementation GENIS IS v1.0				
Operational – Iteration I - ISA		110	ISA	Q3/2013	Q4/2013
Execution – Iteration 2 - ISA	Reusable building blocks (see 1.1.3 Scope): Func.analysis, prototyping, development and adaptation of building blocks. Execution Report	500	ISA	Q2/2013	Q2/2014
Execution – Iteration 2 – non ISA	Integration building blocks Implementation GENIS IS v2.0	160	Admin	Q3/2014	Q4/2014
Operational – Iteration 2		220	ISA	Q3/2014	Q4/2015
Execution – Iteration 3 – non ISA	Integration building blocks Implementation GENIS IS v3.0	220	Admin	Q1/2015	Q4/2015
	Total	2.730			

For a detailed analysis of the costs refer to Chapter 2 in Annex II: "GENIS Building blocks.doc"

1.11.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
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2010	Inception	410	409
2011	Execution 0	350	350
2012	Execution 1	600	
2013	Operational 1	110	
	Execution 2	500	
2014	Operational 2	220	
2015			

1.11.10 ANNEX AND REFERENCES

Annex	Description	Reference link	Attached document
Annex I	Document describing the GENIS architectural approach. From the main business processes to the building blocks required to build the GENIS information System.	GENIS architecture approach.ppt	
Annex II	Document describing the building blocks required to build the GENIS Information System. Including high level needs, features and requirements.	GENIS Building blocks.doc	

1.12 OPEN SOURCE SOFTWARE FOR ONLINE COLLECTION OF STATEMENTS OF SUPPORT FOR EUROPEAN CITIZENS' INITIATIVES

1.12.1 CONTEXT

1.12.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	SG E.1
Associated Services	DIGIT B.1

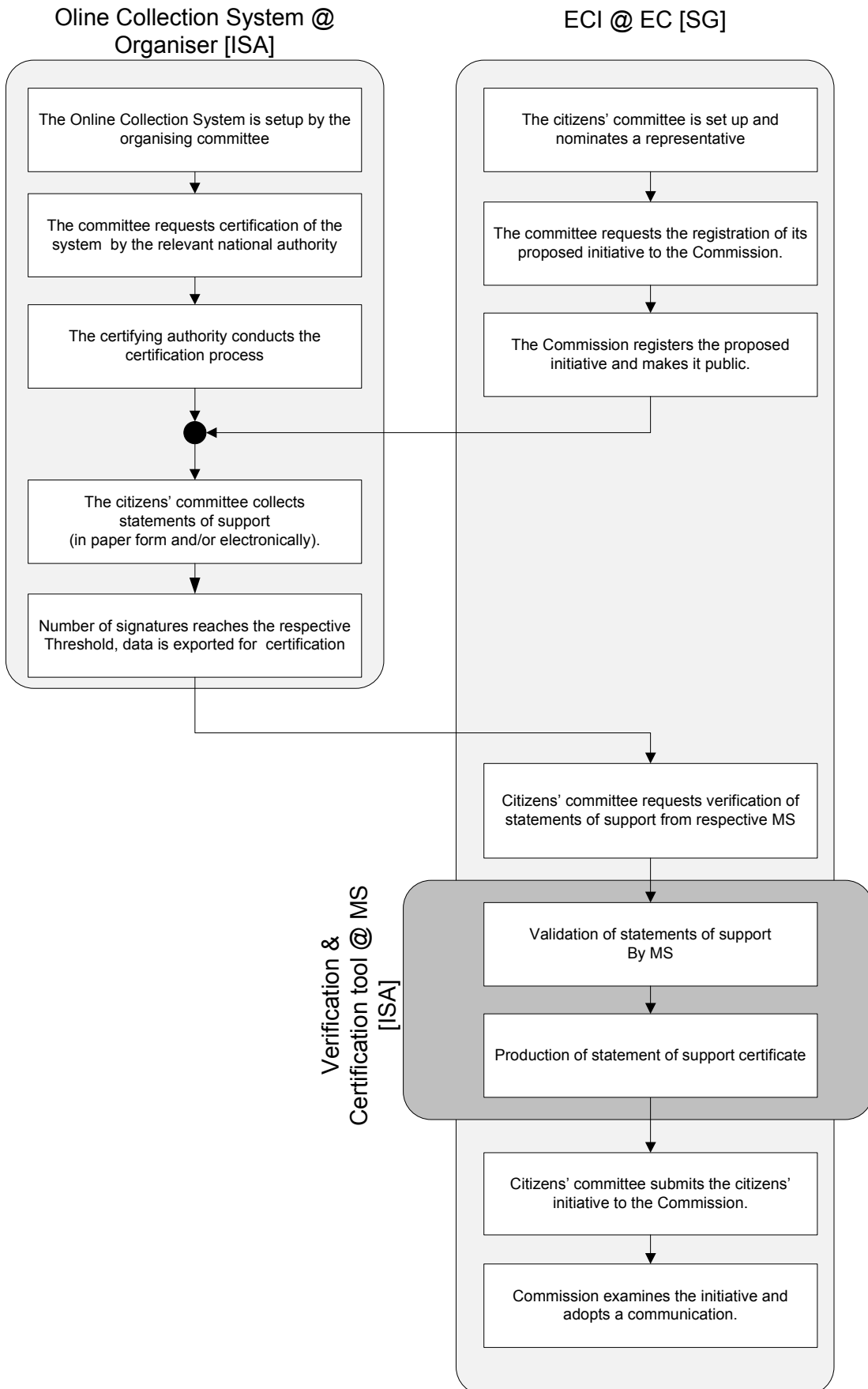
1.12.2 OBJECTIVES

The objective of this action is to provide organisers of citizens' initiatives with a re-usable tool allowing the online collection of statements of support in a way that complies with the Regulation on the citizens' initiative as regards the format and data collected as well as the security and technical requirements.

This re-usable tool will be provided as an open source web application that will be made available as a free download.

This will facilitate on the one hand compliance with the above mentioned requirements by organisers of initiatives, verification of data collected and certification of online collection systems by the relevant Member State authorities.

Below you may find an overview of main activities of the ECI process and how it is supported by IT systems run by European Commission, organisers and member states authorities:



1.12.3 SCOPE

This action is related to the following priority areas of the European Interoperability Strategy:

- Interoperability Architecture – Building blocks
- Trust and Privacy
- Supporting processes

The following actions have been identified and will be further investigated during requirements analysis phase to indicate which developments are necessary.

1. Develop an open source software for online collection of statements of support which complies with the Regulation on the citizens' initiative as regards the format and data collected as well as the security and technical requirements.

In addition to the technical and security features that the software will need to comply with, the following features will be also included in order to facilitate the management of the initiative by the organiser and the verification of statements of support by MS authorities:

- a) Adaptations of the statement of support form according to the Member States of residence/nationality of the signatory;
- b) Automatic grouping of statements of support according to the Member State to which they will be sent for verification;
- c) Possibility to export the statements of support as a data file. This data file could then be sent directly to the relevant Member State (if requested/accepted by that Member State).

2. Develop an open source software for the verification and analysis of collected data as well as producing the certificates of statements of support by MS authorities.

3. Communication material: in order to promote and explain the use of the software, informational material will need to be disseminated.

The following services are proposed for this action.

1. A helpdesk will be put in place to advice organisers of citizens' initiative on the use of the software as well as officials in charge of verifying online collection systems in MS authorities. Meetings of these officials will also be organised in order to explain the use and content of the software and to exchange best practices.

Out of scope:

1. The hosting of this software will not be with the Commission. It will be the responsibility of the organiser to make use of the software in compliance with the requirements set out in the Regulation (Article 6(4) of the proposal for a Regulation on the citizens' initiative). They would still have to obtain certification by the Member State, but this would be facilitated if they used (and did not modify) the software provided by the Commission.

1.12.4 PROBLEM/OPPORTUNITY STATEMENT

The Lisbon Treaty introduces the European citizens' initiative, which enables one million citizens who are nationals of a significant number of Member States to call directly on the European Commission to bring forward an initiative of interest to them in an area of EU competence.

A few ground rules and procedures have to be laid down in a Regulation before citizens can start exercising this new right. The proposal for a Regulation of the European Parliament and of the Council on the citizens' initiative adopted on 31 March 2010 provides that statements of support for citizens' initiatives can be collected by organisers both on paper or electronically.

Given that online collection is more prone to fraud and problems linked to data protection than paper collection, the proposal includes some specific requirements that the organisers' online collection system would have to satisfy. The organiser would be required to ensure that the system complies with these requirements and obtain a certificate confirming that. Only one Member State would need to certify an online collection system used for an initiative across several Member States.

In order to facilitate on the one hand compliance with these requirements by organisers of initiatives and on the other hand certification of online collection systems by the relevant Member State authorities, the Council has proposed that the Commission should develop an open source software for online collection, which would satisfy the requirements of the regulation and could be freely downloaded by anyone.

The open source software has to allow the collection of the data necessary to support a citizens' initiative and has to comply with the security and technical requirements for online collection systems as set out in the proposal:

Article 6(4) of the draft Regulation:

"Online collection systems shall have adequate security and technical features in place in order to ensure that:

- a. only natural persons may submit a statement of support form online;
- b. the data provided online is securely stored, in order to ensure, inter alia, that it may not be modified or used for any other purpose than its indicated support of the given citizens' initiative and to protect personal data against accidental or unlawful destruction or accidental loss, alteration or unauthorized disclosure or access;
- c. the system can generate individual statements of support in a form complying with the model set out in Annex III, in order to allow for the control by the Member States, in accordance with Article 9(2)."

1.12.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Organisers of citizens' initiative	The open source software will be freely downloadable by organisers. It will help organisers to build their online collection systems and it will ease the online collection software certification process.

Beneficiaries	Anticipated benefits
Member States' authorities certifying online collection systems	An easier and quicker process of verification of online collection systems if the organiser uses the open source software provided by the European Commission.
Member States' authorities verifying statements of support	The format of the data collected through online collection systems using the software could facilitate their verification process.
Member States' authorities verifying statements of support	The verification tool can validate data (encrypted statements of support) received from organisers and deliver the required certificates.

1.12.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
Lisbon Treaty - European citizens' initiative (ECI)	Implementation of REGULATION (EU) No 211/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 February 2011 on the citizens' initiative: <i>Article 6(2)</i> <i>By 1 January 2012, the Commission shall set up and thereafter shall maintain open-source software incorporating the relevant technical and security features for compliance with the provisions of this Regulation regarding the online collection systems.</i>
ECAS – STORK Integration	Use ECAS in order to authenticate & sign statements of support using an electronic identity card.

1.12.7 ORGANISATIONAL APPROACH

1.12.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	ISA Coordination Group

1.12.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Meeting	ISA Coordination Group	Participate on Working Group for MS experts for the Trusted Information Exchange
Meeting	MS expert meeting on the implementation of Regulation No 211/2011 on the citizens' initiative	29/06/2011
Meeting	MS expert meeting on the implementation of Regulation No 211/2011 on the citizens' initiative	28/09/2011

1.12.7.3 Governance approach

A Project Steering Committee will be established to provide overall guidance and direction for the project with the participation of all concerned services. Working groups, workshops and other appropriate meetings may be organised with the different experts.

1.12.8 TECHNICAL APPROACH

The approach of this project is based on phases as follows:

Phase 1 (Inception 1):

As a part of the inception phase 1 of the action, DIGIT.B1 carried out a study that covered two aspects:

- Work package 1: Requirements specification for the tool;
- Work package 2: Inventory of existing tools or components eligible for reuse.

IT solutions developed within the eParticipation programme managed by DG INFSO were analysed and used as a basis for the future software (ex: Europetition, eMPower, etc.). Meetings of experts will also be organised to share best practices in the field of online transnational petitioning systems. The output is the requirements for such a tool and which tools or components may be reused in this context.

You may find in the *ANNEX AND REFERENCES* table a link to the results of the study.

Phase 2 (Inception 2):

Having the results of phase 1, a project charter will be elaborated. The aim of this phase was to analyse and find the gaps between the chosen tool (if one) and the requirements. The outcome of this phase is the Project Charter that you may find in the *ANNEX AND REFERENCES* table below.

Phase 3 (Execution 1):

The execution phase was divided into two iterations. The first iteration is focused on the implementation (or adaptation) of the main services and components and the second one will cover remaining functionality identified during inception phase as well as latest requirements coming from member states.

The results of each development phase will be formally documented by an execution report.

Phase 4:

- **Inception 3:** Make a study of the already existing tools for automatic validation of statements of support. The output will be the requirements for such software and which components may be reused in this context.
- **Inception 4:** Make a study on the possibility of using electronic signatures for the online collection tool. Expected output will be the requirements for such software and which components may be reused in this context.

Phase 5

- **Inception 5:** Having the results of **phase 4**, a feasibility study and project charter will be elaborated for the validation tool. The aim of this phase is to analyse and find the gaps that may exist between the chosen tool (if one) and the requirements. Depending on phase 4, if no tool comes out as being appropriate, the feasibility for the new tool, based on existing components will be the outcome of this phase.
- **Inception 6:** Having the results of **phase 4**, a feasibility study, a policy document and project charter will be elaborated for the usage of electronic IDs within online collection tool.

Phase 6

- **Execution 2:** Develop the validation tool to be installed/used by MS authorities;
- **Execution 3:** Implement electronic signature support within online collection tool.

The results of each development phase will be formally documented by an execution report.

The project teams will work using the RUP@EC methodology for software development and ITIL for service management.

1.12.9 COSTS AND MILESTONES

1.12.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception 1	Study	100	ISA	Q1/2011	Q1/2011
Inception 2	Project Charter	100	ISA	Q1/2011	Q2/2011
Execution 1	Execution report	300	ISA	Q2/2011	Q4/2011
Inception 3	Study	50	ISA	Q1/2012	Q3/2012
Inception 4	Study	50	ISA	Q1/2012	Q3/2012
Inception 5	Project Charter	50	ISA	Q3/2012	Q4/2012
Inception 6	Project Charter	50	ISA	Q3/2012	Q4/2012
Execution 2	Execution report	50	ISA	Q4/2012	Q2/2013
Execution 3	Execution report	200	ISA	Q4/2012	Q2/2013
	Total	950			

1.12.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010			50
2011		500	500
2012		200	
2013		250	
2014			
2015			

1.12.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
Study		EC DIGIT - ISA Citizens

Description	Reference link	Attached document
		Inventory of existing systems - FINAL VERSION - public.pdf
Study		EC DIGIT - ISA Citizens initiative requirements - FINAL VERSION amended - public - v20110323.pdf
Project Charter		OCT Project Charter - 2011-07-06 - v1.4.doc

1.13 LEOS - LEGISLATION EDITING OPEN SOFTWARE

1.13.1 Context

1.13.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	SG
Associated Services	DG DIGIT

1.13.2 OBJECTIVES

- Analyse the tools currently used by EU and MS public administrations to create and edit their legal texts;
- Identify best practices, reusable solutions and areas where common efforts are possible;
- Compare the potentials offered by open source software vs. proprietary solutions;
- Taking into account the results of the analyses implement in a second phase a generic solution for common needs while drafting legal texts.

1.13.3 SCOPE

Drafting a new legislation is a complex process, involving many actors. In most democratic countries, the process follows the following sequence of tasks:

- Preparation phase - the upstream "drafting" process is usually performed under the leadership of one specific public Department or a Member of Parliament, and the draft text is generally discussed with stakeholders and modified accordingly. The editing of the text is generally done by clerical staff, using office automation tools. Format, content and structure are continuously changed during this phase.
- Adoption phase - subsequently, the draft legislation is submitted to the political entities responsible for its adoption, (government, Parliament, institutional consultative bodies....) along clearly structured processes. During this political process, the text is progressively stabilising and the final version is generally emerging under the control of a central body, which takes care of the formal, legal and editorial quality of the text under adoption. The tools used at this level are generally office automation tools, but with some "pre-publishing" features in mind.
- Entry into force phase Ultimately, the adopted text is cleaned from any remaining elements of the previous phases and "stamped" as adopted, with a view to publish it and/or make it

available to the concerned parties, in different formats. For the publication process at least, the tools used are often specialised and operated by qualified staff.

In all member states, efforts are ongoing to improve the flows along these phases and use new technologies to facilitate the production of laws and improve their quality.

The EU legislation process is similar but is yet more complex by two additional factors:

- The EU-level processes interact with 27 independent Member state-level processes (e.g. : The Lisbon Treaty gives to the National Parliaments some rights to comment the draft legislation proposed by the Commission);
- EU legislation addressed to citizens need to be translated into 22/23 languages and all adopted languages have the same legal value.

There is a concern in all public administrations about the "continuity of editing facilities" along complex processes and the potential offered by IT tools in assisting the authors in respecting high level quality standards. From a more technical viewpoint, this concern addresses issues relating to

- the standardisation of legislative texts (despite the fact that their structure can be rather complex, incorporate graphics and tables, and vary from one document to another);
- the dichotomy between "general office automation tools" and "specialised software";
- the use of the XML standard and the potential of open source re-usable facilities;
- the long term conservation and authenticity of legal electronic texts.

1.13.4 PROBLEM/OPPORTUNITY STATEMENT

Office automation tools are widespread used for creating and editing texts.

In the case of legal texts,

- the creation step is only the first one in a process leading to the publication and the entry into force of the laws;
- texts might need to be reviewed by other internal or external entities, using different techniques and tools;
- the texts have to respect certain presentation rules and canvasses;
- there are XML standardisation activities aiming at defining a generic model for a law (like Metalex);
- All administrations are facing the question of reconciling the freedom associated with Office automation tools and the necessity to produce structured documents at the end of the process;
- There is no overall view of the way Member states address that question, with a view to share best practices;
- The EU and national legislations are more and more interconnected (for instance when Member state implement EU directives or when National Parliaments issue opinions on the Commission proposals) and Commission legal texts could be re-used in these entities.

Therefore, a better understanding of the way public administrations address the issue of drafting their legislations is useful, with a view to identify best practices, improvements and areas where common efforts and developments are possible (with a special attention on the potential offered by open source software in this respect).

1.13.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations and EU Institutions	<p>Re-use of best practices and Office automation add-ons.</p> <p>Save costs, improve efficiency and transparency, reduce time-to-market and ensure interoperability as handling legal documents and follow up of legal procedures can be automated.</p> <p>Experience, lessons learnt, specifications, tools and components published as open source re-usable by any Member State or EU Institution.</p> <p>Facilitate the interconnection of legal data bases and the performance of search engines.</p>

1.13.6 RELATED EU ACTIONS / POLICIES

No related EU actions / policies.

1.13.7 ORGANISATIONAL APPROACH

1.13.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
LEOS Community	The community is made of people from public administration in the Member States and European institutions, having participated to the first study on existing situation and planned projects.

1.13.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Meeting/workshop	Members of LEOS Community	Ad hoc

1.13.7.3 Governance approach

A Project Steering Committee will be set up to provide overall guidance and direction for the project with the participation of all concerned services. Working groups, workshops and other appropriate meetings will be organised with the different administrations and institutions in order to gather their expertise and their requirements.

1.13.8 TECHNICAL APPROACH

The approach of this project is based on several phases as explained hereafter.

The first phase (inception – 1) of the project included a study of the existing situation and planned projects in Member States and EU institutions, with a view to identify needs, trends, strengths, best practices and opportunities. A detailed questionnaire has been set-up and disseminated. This study was very welcome and some useful information on existing and planned projects has been received from Members States and European Institutions (AT, CZ, DE, DK, EE, FI, IE, IT, LT, NL, UK, EP...).

Based on these results, the second phase (inception – 2) will consist in:

- Defining a set of common functional requirements, based on the functionalities described in the AS IS of tools currently used in MS and EU institutions, as collected through the questionnaire.
- Defining a common structure:
 - A study on the “compatibility” / adequacy of an existing schema with National and European structures;
 - Assessment of what needs to be done (adaptation of structures or of the standard).
- Proof of Concept:
 - Which validates the structure, illustrates the requirements;
 - The choice of target technical platform(s) – could be among OTS tools studied in phase 1.

Depending on the conclusions of the second phase, the third phase (Execution – 1) might be the construction of a prototype, which could be tested by a few interested administrations.

Finally, the success of the third phase would lead to the generalisation of the tool and the associated support (fourth phase – Execution – 2 + operational).

The project will be led by DIGIT, with support of the SG of the Commission. Associated administrations will to be identified during phase 1.

1.13.9 COSTS AND MILESTONES

1.13.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception 1	Study	200	ISA	Q2/2011	Q3/2012
Inception 2	Requirements analysis Proof of concepts Project charter	300	ISA	Q2/2012	Q3/2014
Execution 1	Prototype Execution report		ISA	Q2/2013	Q3/2014
Execution 2 Operational			ISA	Q1/2015	Q4/2015
	Total	500			

1.13.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	-	-	-
2011	Inception 1	200	200
2012	Inception 2	300	
2013			
2014			
2015			

1.13.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

1.14 CROSS SECTOR SOLVIT

1.14.1 Context

1.14.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG-MARKT
Associated Services	DG DIGIT B.4 (system supplier)

1.14.2 OBJECTIVES

The new cross-sector information system will, as a common service, meet the objectives of the ISA programme as it will:

- deliver a generic solution to be used by Member States in similar contexts of cooperation between national administrations and with the European Commission in specific policy fields;
- offer a service oriented architecture in order to facilitate the interoperability with other information systems from the European Commission (EU Pilot, Your Europe Advice,) and the MS;
- reduce administrative burden and costs (support problem-solving in the context of misapplication of EU law in an easy and efficient way between MS);
- enhance the feedback capabilities provided by the new SOLVIT to prevent future problems and thus contribute to more and better opportunities for EU citizens and businesses in the Internal Market and other policy areas;
- facilitate cross-border interaction between European public administrations via a secure internet application;
- be used by all 30 EEA Member States supporting all EEA official languages;
- adhere to the principles of security, privacy and protection of personal data.

1.14.3 SCOPE

The SOLVIT network was created in 2002 by the European Commission and the EEA Member States in order to provide citizens and businesses with practical solutions to problems caused by the misapplication of single market rules. The network is composed by a SOLVIT centre in each Member State set up within the national administrations. The centres cooperate via a web application to provide rapid and pragmatic solutions to the problems submitted by citizens and businesses. The European Commission facilitates the SOLVIT network and offers the current SOLVIT IT system to Member States. In order to allow for a generic and cross-sector use of the system, the

European Commission decided to develop a new cross-sector information system supporting these requirements.

The new system must be service oriented to easily interoperate with other existing systems such as the EU Pilot (an online information exchange and problem solving network between the Commission and Member States created by the Commission to improve the quality and speed of responses to enquiries and complaints relating to the application of EU law).

A possible future extension would be to offer the Member States an open-source version of the new cross-sector system to support problem-solving between national, regional or local administrations from the same Member State. The development of the new system will use appropriate technology in order that the development of an open-source version of the system would require limited resources.

The submission to the ISA Programme is for funding in accordance with Article 3 c) for the establishment and improvement of the new cross-sector SOLVIT system as a common service. The action addresses the "trusted information exchange" priority area from the European Interoperability Strategy (EIS).

1.14.4 PROBLEM/OPPORTUNITY STATEMENT

1. The initial system has been designed for the single purpose of making the problem solving more transparent. In the mean time the case load of SOLVIT has grown from 150 cases a year to 150 cases a month. There is political pressure (European Parliament's different resolutions; Monti report on the Internal Market) on the system to grow further and to make use of the system as an instrument for feedback on how the internal market is functioning in practice. Thus enabling policy makers to address these problems in a structural way, including the monitoring of how unresolved cases are followed up.
2. With the growing case load it also becomes important that there is a possibility to integrate or link up existing or future administrative cooperation systems, which are either sector or target group specific systems in order to ensure effective case handling and feedback.
3. DG MARKT is starting an ambitious evaluation of SOLVIT with a view to further reinforcing the network, at the request of the European Parliament. The outcome of this evaluation is likely to result in new requirements to be supported by the new system.
4. Also there is a large number of different information and assistance services. The Commission is promoting the cooperation between these networks as it will make the signposting more effective and thus provides a more direct and easy access to the right service for citizens and businesses. The optimal situation would be if all the different services could be linked up and this way an easy flow of information about the signposting and the follow up to cases can be generated. This situation can be reached if these services use the same system for cooperation and problem solving.
5. The SOLVIT system is currently used to solve problems in the context of incorrect application of Internal Market law even though mechanism of informal problem-solving can and should be used in other policy areas.
6. Experts from national administrations in certain Internal Market areas should be able to link up to SOLVIT to assist SOLVIT centres in handling complex cases, e.g. experts from Administrative Commission on social security.
7. The new cross-sector system will be implemented with the knowledge and experience acquired during the development of the Internal Market Information System (IMI). Following

the analysis of the new SOLVIT system and the launch of the IMI Communication strategy earlier this year, it was concluded that important synergies and cost savings could be obtained by integrating SOLVIT within IMI. Introducing SOLVIT as a module within IMI, means that IMI's services (user management, authentication), technologies and infrastructure will be shared, generating future savings in terms of maintenance and hosting, and reducing the number of different applications offered to member states. Any costs arising from the integration will be compensated by the savings resulting from the reuse of IMI components and services. The SOLVIT module will provide a generic problem solving workflow based on case handling as well as the required reporting and search features.

1.14.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Citizens and businesses	<p>Citizens and businesses often encounter problems and barriers when trying to enforce their Internal Market rights. SOLVIT provides fast and free service and tries to solve such problems caused by public administration informally, thus avoiding for the client to start lengthy and costly legal proceedings. Since its start it has known a steady growth of 150 cases a year in 2002 to 150 cases a month in 2009. With a Europe of 500 million inhabitants it is assumed that this is still only the tip of the iceberg.</p> <p>Because of the clear quality standards and high performance, SOLVIT serves as an example for other problem solving networks. The new system can extend the advantages of SOLVIT to other policy areas and it will further help European citizens and enterprises to fully benefit from their rights. It will also enable better and more consistent implementation of community legislation. The feedback provided will also enable policy makers to address structural problems and avoid future problems for citizens and businesses.</p>
Public administrations from Member States	<p>This new technical solution will enable administrations and MS to cooperate in a most-efficient and fast way in order to solve problems related to the misapplication of EU law, first in the context of the Internal Market but ultimately, also in other relevant policy areas.</p> <p>Problem-solving through SOLVIT helps to avoid a significant number of infringement procedures as it solves problems informally before they reach the level of formal complaints to the European Commission.</p>
European Commission (MARKT, ENTR, EMPL, HOME, JUST, AGRI, TAXUD, MOVE; SANCO; EAC; SG)	<p>The new SOLVIT system will offer assistance to the different services of the European Commission responsible for the correct application of EU law in handling individual complaints. Improved possibilities for feedback from the database will make it possible to give tailor-made reports to the policy units on the functioning of the internal market and help Commission services decide which problems need to be addressed.</p>

1.14.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
Internal Market Single Market Act as adopted 27/10/2010 (COM 2010 (608) final	Making the internal market function better for citizens and businesses and providing them with practical redress when their rights are being denied in cross border situations. Action nr 50 from SMA: <i>"The Commission, in partnership with the Member States, will strengthen informal problem-solving tools, specifically by consolidating and reinforcing the EU Pilot project, the SOLVIT network and the networks of European Consumer Centres. Based on an assessment in 2010, it will make specific proposals concerning SOLVIT"</i>

1.14.7 ORGANISATIONAL APPROACH

1.14.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
European Commission	DG MARKT, Commission SOLVIT team's users able to perform administrative functions in the system, who can also oversee the case handling procedure. Secretariat General, DG EU Pilot and CHAP teams DG MARKT: Your Europe Advice DG COMM: EDCC
End users: SOLVIT centres	The SOLVIT centres in the EU member states (as well as in Norway, Iceland and Liechtenstein)
End users: Citizens and Businesses	The users who submit cases to the system
System Owner	Directorate General of the European Commission responsible for Internal Market and Services. DG MARKT is represented by MARKET.B.TF1, Task Force Single Market advice and SOLVIT, Amaryllis Verhoeven
System Supplier	Directorate General of the European Commission responsible for

Stakeholders	Representatives
	Information technology. DG DIGIT is represented by DIGIT B4, Angelo Tosetti
Project Manager	DG DIGIT/B4, Information Systems supporting Policies, Financial management and Activity management, represented by Krzysztof Iwanski
Business Manager	DG MARKT.B.TF1, Task Force Single Market advice and SOLVIT, represented by Miguel Angel Gomez Zotano
Document Management Officer	The Document Management Officer is nominated by the DG and ensures a coherent implementation of the Decision 2002/47/CE , CECA , Euratom in the DG: represented in DG MARKT by Michele Hance-Jalhay.
Data Protection Coordinator	The Data Protection coordinator is nominated by the DG and ensures a coherent implementation of the Regulation 45/2001 in the DG, represented in MARKT by Hakan Ander.

1.14.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
SOLVIT Workshops	<ul style="list-style-type: none"> - Representatives from the different SOLVIT Centres of the MS - DG MARKT.B.TF1, Task Force Single Market advice and SOLVIT staff 	Two to three times a year, first one will be end of September 2011.

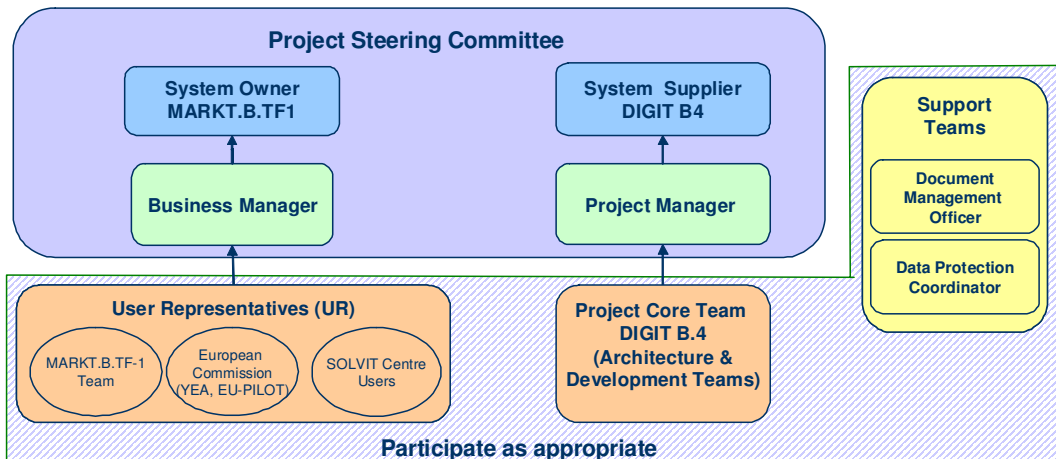
1.14.7.3 Governance approach

The Governance approach is based on a Steering Committee that will:

- Champion the project, raising awareness at senior level;
- Guide and promote the successful execution of the project at a strategic level;
- Provide high level monitoring and control of the project;
- Adopt the project charter;
- Follow timely delivery and quality of new developments delivered by the system supplier;
- Set priorities, authorise plan deviations, scope changes with high project impact and decide on recommendations;
- Arbitrate on conflicts and negotiate solutions to important problems;
- Drive and manage change in the organisation;
- Ensure adherence to organisation policies and directions;

- Approve and sign-off all key management milestone artefacts (vision document, project plan, business case, etc).

The Steering Committee is composed of DG MARKT (system owner) and DIGIT (system supplier) with the participation of other stakeholders when required; as depicted in the following diagram:

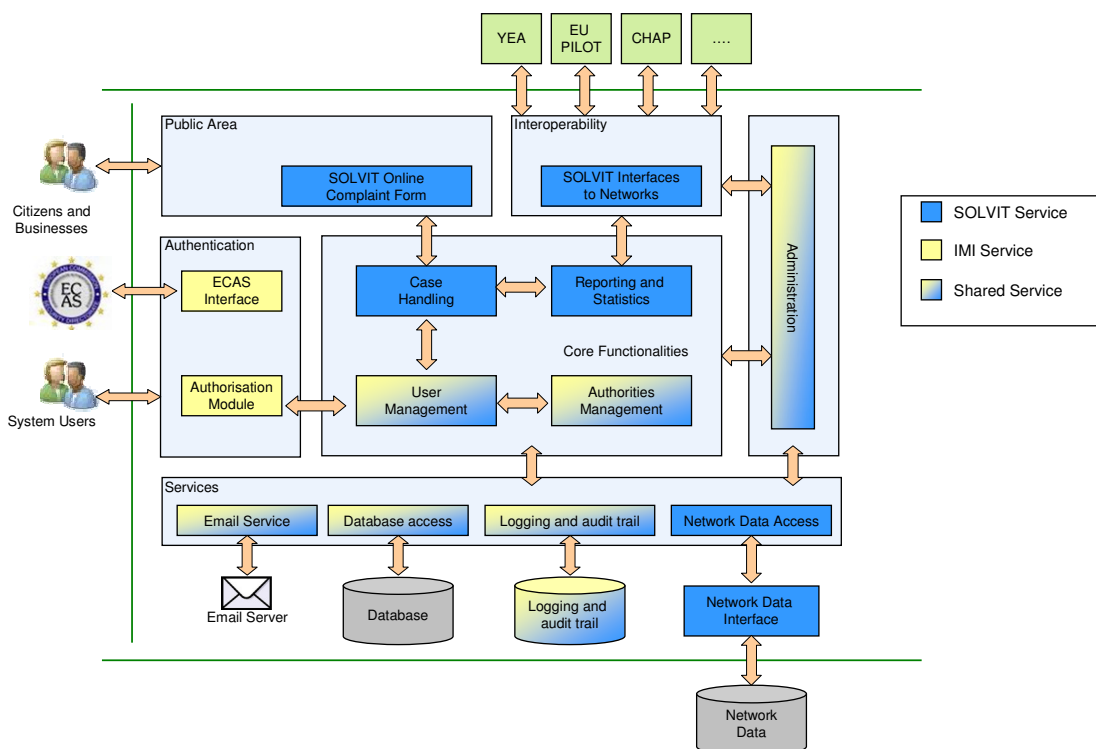


Following the integration of SOLVIT within IMI and the

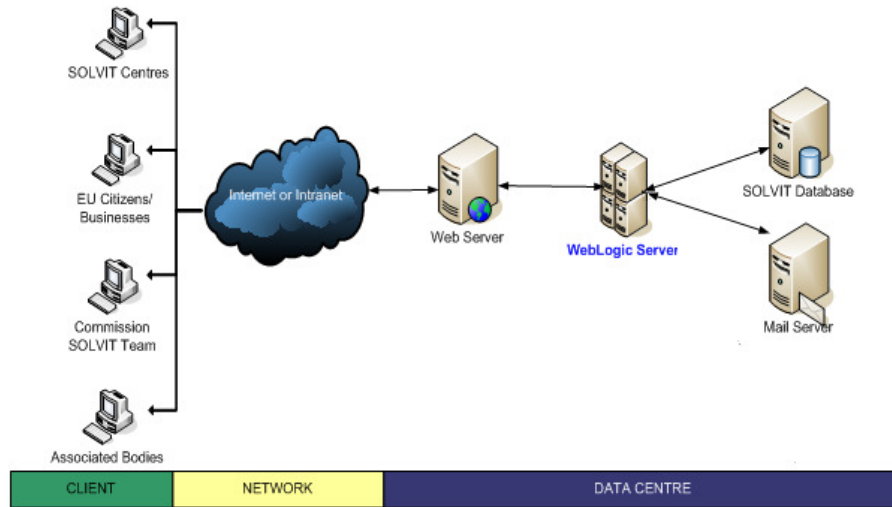
second release of SOLVIT functionality described in this document, a single IMI-SOLVIT Governance model will be established.

1.14.8 TECHNICAL APPROACH

From a technical point of view, SOLVIT is a 3-tier web application based on an ORACLE database, running on a Weblogic Application Server and accessed through a web browser. The following image shows the complete system in a Context Diagram:



This Context Diagram will be supported by the following Operational Components:



1.14.9 COSTS AND MILESTONES

This project will be broken down in one inception phase and two execution phases.

Inception Phase

The first and kick-off phase of the project will be the inception phase whereby a project charter will be produced including the activities and the scope of the project.

Execution Phases

Following the project charter phase, the project should then be executed in two phases:

- Phase 1 will focus on developing an information system supporting the new needs and features of the SOLVIT system and at the same time being generic enough to be directly reused in other policy areas.
- Phase 2 will improve the system by providing services to facilitate the interoperability with existing systems from the European Commission and Member States as well as new features to be defined during the SOLVIT evaluation as requested by the European Parliament.

1.14.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Project Charter	0	Internal DIGIT/MARKT resources	Q4/2010	Q1/2011
Execution	First release of the new and generic SOLVIT system to replace the current system.	550	ISA	Q2/2011	Q2/2012
Execution	Second release of the new SOLVIT system including services and new requirements.	250	ISA	Q2/2012	Q4/2012
	Total	800			

1.14.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Inception	0	
2011	Execution Release 1	550	
2012	Execution Release 2	250	
2013			
2014			
2015			

1.14.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

1.15 OPEN GOVERNMENT DATA (*FUNDING CONCLUDED*)

1.15.1 CONTEXT

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	DG DIGIT
Associated Services	

1.15.2 OBJECTIVES

The goal of this activity is twofold:

- To assist the Commission services to understand the role of Open Government Data (OGD) and how the Commission services can make relevant information available to others for reuse;
- To run small scale pilot implementations in order to gather experiences, identify directions and receive feedback on how Open Government Data (OGD) technologies and tools can be used within the Commission context.

More specifically, the "Open Government Data" activity will draft an OGD framework for the Commission, documenting the present situation, and identifying opportunities, problems and risks in the area of OGD by:

- identifying and evaluating existing methodologies and business processes, for implementing and supporting the above-mentioned framework;
- identifying, documenting and evaluating existing technologies and tools for publishing, accessing and reusing OGD;
- identifying existing best practices.

This action and the above objectives are addressing the ISA programme, Decision No 922/2009/EC of the European Parliament and of the Council [2], in general and in specific article 4 (b) "openness", (c) "reusability" and (e) "security".

1.15.3 SCOPE

The action has been identified within the Trusted Information Exchange cluster within the EIS. It may also have an effect and influence the cluster "Interoperability Architecture", in case the findings indicate that OGD policies become an essential part of a European interoperability architecture in general.

Coordination with the Action "Access to base registers" is required as there may be some overlapping and/or sharing of findings of common interest (e.g. data/registries descriptions and metadata).

Links and relationships with the Action "Catalogue of Services" should be also identified as OGD may be used and facilitate cross-boarder service execution, while information about services and even the Catalogue of Service per se may become available as a core open dataset.

1.15.4 PROBLEM/OPPORTUNITY STATEMENT

Governmental agencies are considered to be the most significant data owners and providers in modern societies. The sheer volume and wealth of this data makes apparent the potential benefits of reusing, combining, and processing governmental data. However, administrations typically express reluctance to make their data available, for various cultural, political, institutional and technical reasons. They keep data within their legacy systems, fenced and isolated. The EU has already taken action in this area via the Public Sector Information reuse directive.

The Open Government Data movement which recently becomes visible in various countries promotes the openness on public sector information. This is often materialised with public sector catalogues becoming available through governmental portals where public agencies make their datasets available to the general public.

However, the first efforts of publishing data in raw format and in an ad hoc fashion often result in extended lists of datasets with huge bulk of data which is difficult to be processed, combined and reused. As a result of this fragmented development, there is no up-to-date information with regards to available data on both a member state and EU level. There is also a lack of technologies and tools to efficiently and easily access and reuse Open Government Data. Efforts like the Linked Data initiative try to ameliorate such problems by proposing approaches and tools to semantically link the data in the Linked Data Cloud¹⁶. New issues arise then related to provenance, security, quality, as well as technology readiness for supporting such advanced data publishing and querying services.

Aside efforts at national and/or regional level, there are a number of European (research) projects like the European Public Sector Information (PSI) Platform which was set up as a result of a CIP project¹⁷. Moreover the newly launched LOD2 IP 7th Framework ICT project¹⁸ promises to increase public access to high-value, machine-readable data sets generated by the European, national as well as regional governments and public administrations. Last, the Linked Open Data Around the Clock (LATC)¹⁹ FP7 Support Action supports interesting partners to publish and consume Linked Data on the Web.

Nevertheless, the practical implications of national OGD projects in promoting interoperability amongst European public administration and the EU role are still not understood or systematically discussed. National Interoperability Frameworks (NIF's) so far seem to be unaware of Open Government Data related policies. The effects of such policies on NIF's, cross-boarder special

¹⁶ <http://richard.cyganiak.de/2007/10/ld/>

¹⁷ The CIP project was funded by INFSO E6 Safer Internet. The follow-up project to the PSI platform is managed by INFSO Digital Content and Cognitive Systems, Unit E4 — Access to Information

¹⁸ <http://lod2.eu/WorkPackage/wp9.html>

¹⁹ <http://latc-project.eu/>

requirements, the EU perspective and the interoperability challenges, the opportunities and risks for this growing number of governmental data catalogues which so far follow an ad hoc development model also need to be understood. Opportunities for harmonization amongst the various national and local projects should be also identified as well as the emerging new interoperability requirements in this fast-growing public sector information market. Last, the feasibility of a European level infrastructure may be also investigated and alternative architectural approaches may be identified and assessed.

These issues are tackled at the EU level via a combination of activities: the research projects mentioned above, the revision of the PSI directive, some planned activities under the CIP. Final goal is to propose a coherent framework as a roadmap for Open Government Data to the MSs and the EU.

This ISA activity will collaborate closely with all other relevant Commission activities. The activity will also prepare the Commission to play its role in such collaboration and to "lead by example".

1.15.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	Ability to efficiently re-use information available in other member states. Easier provision of cross-border data exchange.
European Citizens	Easy access to European public sector data and information.
Industry	New business opportunities for value added services and data mash-ups in a single EU Public Sector Information marketplace.

1.15.6 ORGANISATIONAL AND TECHNICAL APPROACH

The study will deliver its results in a progressive and iterative fashion:

1. Learning from others: Identification of a national, regional, local Open Government Data projects in EU and beyond, understanding policy and technological drivers, understanding implementation strategies, costs and expected benefits. This will be a study of available information, combined with selected contacts and engagement in relevant communities on the Internet.
2. Identification of possible EC sources of Open Government Data. This will be done in two iterations, a first one identifying "low-hanging fruit" (information that is already made publically available or that easily can be made available) and a second one, identifying further potential sources of information.
3. Creation of an EC Open Government Data Community of Practice. Identification of EC services that should be involved and the key persons in these services. Bringing these key persons together and introduce them to the bigger community of practice that is

forming on the web. Support this community of practice by using existing collaboration platforms.

4. Define the needs of a Commission OFG portal and propose an architecture for such portal.
5. The output of the activity will be a proposal for a structural approach to OGD in the Commission and how this structural approach should create synergies with work done in Member States and elsewhere.

1.15.7 COSTS AND MILESTONES

As the exact scope of the total action is not known yet, only the budget to start the activity is requested at present. Over the coming months, the overall approach of the Commission toward Open Government Data will be defined and additional work may be identified.

1.15.7.1 Breakdown of anticipated costs and related milestones

Phase	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	Study	100	ISA	Q1/2011	Q4/2011
	Total	100			

1.15.7.2 Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	-	-
2011	100	
2012		
2013		
2014		
2015		

1.16 DEVELOPMENT OF KEY IT COMPONENTS FOR THE ESTABLISHMENT OF THE COMMON INFORMATION SHARING ENVIRONMENT (CISE) FOR THE SURVEILLANCE OF THE EU MARITIME DOMAIN

1.16.1 Context

1.16.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	European Commission – DG MARE D1
Associated Services	European Commission– JRC/IPSC G4 - DG MOVE D1 & D2 & D4 – DG HOME C1 – DG TAXUD A1 & A3 – ENTR H3 – DIGIT B4 – ECHO B1 – ENV D2 – JUST B3

1.16.2 OBJECTIVES

The global objective is to establish a Common Information Sharing Environment (CISE) for enhancing awareness of what is happening at sea as a contribution to efficiency in maritime operations and eventually safer, more secure and cleaner seas. In line with the EU digital agenda, this translates into interoperable and trusted cross-sector data exchange between public administrations across seven policy areas (maritime safety and security, marine environment and pollution preparedness and response, fisheries control, border control, law enforcement, customs and defence) within the EU maritime domain. The cross-sector aspect constitutes the major innovative aspect of CISE. Indeed, public authorities could substantially enhance their sectoral awareness picture by complementing it with information already gathered by authorities from other sectors. To illustrate with an invented example: a law enforcement authority enquiring on illegal arms smuggling carried out on board a fishing vessel may not only require police intelligence gathered by Europol through systems such as 'Siena' and potentially exchanged with border guards through the future 'Eurosur' or the 'European Patrol's Network' systems but may well also require the vessel's position provided by the Transport community through systems such as 'SafeSeaNet' and 'LRIT', information as regards the fishing activities of the said vessel provided by the fisheries authorities through systems such as 'VMS' and 'VDS' and may finally exchange part of this information with Coast guards or even military vessels through potential future systems such as 'Marsur' in case the latter authorities are required for an interception operation at sea. All such information exists only in different formats and can therefore at present not be exchanged and in a straightforward and readable manner between all the above actors through a coherent

system. The CISE shall provide an information environment that allows for such seamless and even automated cross-sector exchange of readable information between a more than 400 relevant public authorities throughout the EU/EEA.

The specific objectives of this action are, in fine, (i) the technological and functional definition of the CISE, (ii) prototyping critical functions and infrastructure, (iii) create a blueprint of the supporting framework to be implemented from 2015, including the governance aspects.

The initiative is pushed by the Member States Expert Subgroup on Integrated Maritime Surveillance, and supported by already several Council decisions²⁰.

1.16.3 SCOPE

A group of experts established by the Commission (The CISE Technical Advisory Group, TAG) already identified more than 500 data types together with associated supply and demand across 400+ public authorities belonging to 7 User Communities which were identified for the purposes of CISE. These 400+ public authorities are considered both data providers and end-users of CISE. The project entails the establishment of generic reusable tools to achieve the interoperable and trusted exchange of data, while complying with the diverse data security obligations.

1.16.4 PROBLEM/OPPORTUNITY STATEMENT

Due to diversity of legal frameworks across the EU, data provided by such systems is not interoperable. Today, only a fraction of data is or can be exchanged/exposed, mostly sectoral and hardly cross-border. Information sensitivity is generally considered a barrier for data sharing. The project will enable following opportunities:

- a scalable, adaptive and open solution for sharing and exchanging adequately protected data;
- building from existing systems and networks, with minimum cost impact;
- integrating results from ISA ongoing actions;
- allowing the numerous maritime user communities to seamlessly exchange data.

1.16.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
EU institutions and	Effective implementation and enforcement of EU legislation in the

²⁰ http://ec.europa.eu/maritimeaffairs/pdf/external_relations_council_conclusions_17112009_en.pdf
http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/genaff/122177.pdf
http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/genaff/115166.pdf
http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/gena/104617.pdf

Beneficiaries	Anticipated benefits
agencies	fields of maritime safety and security, border control and fisheries control, customs and environment. Incremental value added for surveillance systems they manage through expansion of users. Cooperative governance at the level of EU Agencies.
National authorities in the EU/EEA with a remit at sea	No duplication in data collection reduces costs. Powerful data mining for reliable awareness picture and increased effectiveness of operations. Civil/military cooperation improves public and national security. Silo-breaking mentality improves maritime governance and stimulates competition amongst public services.
Citizens in the EU/EEA	Safety, security and control are fundamentals for democracy and preconditions for maritime activities to flourish (contribution to economic growth).
European industry	Development of appropriate interoperability standards enhances competitiveness and demand for surveillance capabilities. Unfolding a net to unreliable maritime operators will benefit EU maritime industry.

1.16.6 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation
1. All policies related to the seven maritime user communities/ functions to be served by the CISE	The 7 user communities to be interconnected through the CISE and their functions are: maritime safety and security, marine environment and pollution preparedness and response, fisheries control, border control, Law enforcement, customs and defence. Cross-border and cross-sectoral data exchange generates knowledge and enables sound decision making and better implementation of EU legislation in the above policy areas. Further specific examples with respect to three of those functions are given below (see points 3-4).
2. Digital Agenda	CISE is relevant to several focus areas of the digital agenda but most pertinent to the creation of borderless online environment and services in the public domain as well as to the application of ICT solutions to respond to societal challenges. It includes consideration of INSPIRE.
3. Maritime Transport	The maritime transport sector has developed efficient systems to monitor maritime traffic. This picture is relevant and useful to all maritime user communities. The 2011 transport white paper (COM(2011)144) specifically refers to the contribution of the maritime transport monitoring and data exchange system SafeSeaNet to the CISE.
4. Illegal Immigration	The CISE was referred to as the 8th and final step of the Border Surveillance System EUROSUR (COM(2008)68final), stating that it will

Action / Policy	Description of relation
	go beyond border related aspects, thus covering all maritime activities.
Inspire Directive	As the INSPIRE also addresses the spatial harmonisation of data related to basic hydrographical including marine areas as well as oceanographic features and sea regions, the CISE action will take into account the relevant data schemas and exchange put in place in the INSPIRE infrastructure
5. CSDP	The CISE has been one of the first tangible domains of civil/military cooperation at EU level, as beneficial to the tasks of both authorities. CSDP operations - being of humanitarian or security nature - may benefit from enhanced data exchanges. The CISE is specifically mentioned in EEAS papers on the concept of Maritime Security Operations (discussions taking place in the EU Military Staff and EU military Committee).

1.16.7 ORGANISATIONAL APPROACH

1.16.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
EU level: Commission DGs and Agencies	DG MARE, JRC, MOVE, HOME, TAXUD, ENV, DIGIT, ECHO, JUST EMSA, FRONTEX, CFCA, EUROPOL, EEA, MAOC, EDA, EUSC
Member States	National authorities carrying out the 7 CISE functions. They will be the participants to the CISE, to be identified in autumn 2011 in accordance with Step 1 of the Roadmap towards establishing the CISE (COM(2010)584). Preliminary estimation raises the number to ~400 national authorities contributing to the 7 identified mission areas (User Communities).

1.16.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Member States Experts sub- group on the integration of	Cross-sectoral group, comprising national representatives from all EU and EEA states, alongside	2 to 4 MSEsG meetings per year

Event	Representatives	Frequency of meetings / absolute dates of meetings?
maritime surveillance (MSEsG)	EU Agencies and representatives of the pilot projects on the integration of maritime surveillance (BlueMassMed and MARSUNO). A 17-member Technical Advisory Group (TAG) with experts from each user community + EU Agency + pilot projects assists the JRC and DG MARE in the implementation of the CISE Roadmap and provide feedback to the work of the MSEG.	5 to 7 TAG meetings per year
Sectoral working groups	Member States representatives from the respective sectoral policy area (e.g. High Level Steering Group of SafeSeaNet - transport, Eurosur working group – border control, fisheries control working group, PT MARSUR group -defence).	Depending on the group, approximately three to four times a year
Bilateral visits to Member States / Agencies	CISE always included on the agenda.	20 per year
European Maritime Day	All kinds of stakeholders, including the general public. One workshop dedicated to the CISE each year.	May each year
Leaflets, publication material, website	In particular in the context of European Maritime Day, exhibits in Parliament etc Maritime Forum.	https://webgate.ec.europa.eu/maritimeforum

1.16.7.3 Governance approach

Management of the action will be done jointly by DG MARE D1 and the Joint Research Centre, under the provisions of the Administrative Arrangement (AA) between the two Commission services of 21.9.2010 (ARES(2010)617946 – 22.9.2010) or any amendment/extension thereof. Four persons (2 from DG MARE and 2 from the JRC) will be responsible for the implementation of the action.

There are already established bodies/groups ensuring stakeholders' involvement and coordination at all levels:

- the seven user communities, including the EU Agencies, participate to the Technical Advisory Group bringing in the necessary expertise from their sectoral policy and related actions;
- an interservice group consisting of representatives of all associated DGs ensures coordination at Commission level;
- the Member States Experts sub-group which is the principal actor for the implementation of the CISE Roadmap will be kept updated regularly on the development of the project.

1.16.8 TECHNICAL APPROACH

This action contributes to *Step 4* of the Roadmap to establish CISE²¹. The activities performed through this action will produce different technical elements in order to develop the supporting framework which will have the capability of:

- Enabling trusted data exchange between largely decentralised information systems, while the data ownership is retained by the originating administrations, in full respect of the specificities of national legislation;
- Defining the standardised data structures to be exchanged between existing systems in order to bridge with least modification all pre-existing information repositories and information systems;
- Securing the data exchange (preferred approach will be to use the Internet) and providing a flexible and efficient access rights management solution allowing dynamic management of access rights across all user communities (including Civilian and Defence communities);
- Offering a fully scalable and flexible solution allowing adding easily new services.

The above mentioned actions shall be carried out taking into consideration the results of other projects, such as:

- FP7 projects²²;
- Lessons learned from pilot projects in the maritime domain (BlueMassMed, MARSUNO,...);
- Ongoing developments from EU agencies (EDA/MARSUR, EMSA/IMDatE, FRONTEX/EUROSUR,...);
- Existing ISA actions, like the eTrustEx platform (already under investigation by DG MARE);
- Other EU funded Pan-European interoperability projects such as the European Competitiveness and Innovation Programme (CIP) Large Scale Pilots that have the potential of being re-used across sectors (ex PEPPOL, SPOCS, eCodex etc).

The high level planning is elaborated as follows and associated cost and milestones are detailed in section 1.1.9.1:

ISA Inception Phase

1. Preparation of Terms of Reference for a study on the existing information systems landscape in the field of maritime surveillance (as-is situation), and on the existing projects which could potentially be [partially] reused (e.g. the ISA actions). The study will already identify weaknesses of a status-quo, existing problems and opportunities for improving the efficiency in maritime operations. The study will also provide a good understanding of what is already existing at national, regional or European level, in view of reusing as much as possible (software components as well as concepts).
2. Execution of the study by the selected contractor (use of a framework contract).

²¹ Ref2 hereafter

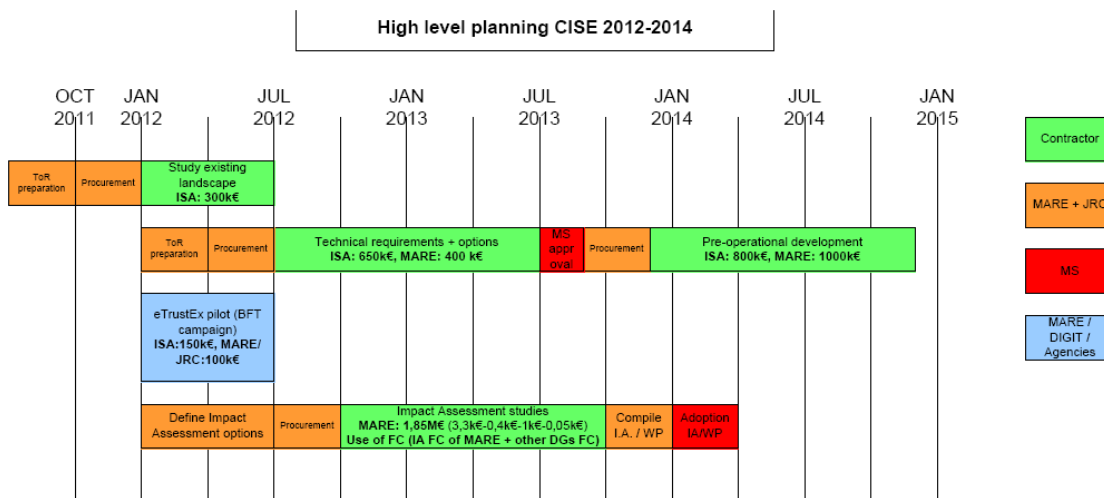
²² IPs SeaBILLA and I2C, DP Perseus, some GMES Projects

3. In parallel to this study, DG MARE will set up an interoperability pilot between a few EU Agencies (EMSA, EFCA, FRONTEX) based on eTrustEx to have a better practical understanding of eTrustEx, to identify potential deviations from the CISE needs and to collect arguments in favour of the solution.
4. Elaboration of the ISA Project Charter and elaboration of a detailed Business Case.

ISA Execution Phase

5. Preparation of Terms of Reference for technical definition of the CISE supporting framework on the basis of business requirements. The full understanding of CISE needs and corresponding features shall be assessed against different technical options. The eTrustEx pilot (see step 3) will allow an efficient assessment of CISE against eTrustEx in view of building a strong argumentation to the MS Expert Group (note that the CISE environment will be used by MS public administrations and that the Commission doesn't play an active role in the operational aspects, hence the difficulty to *impose* upfront a Commission corporate solution).
6. Execution of the technical definition by the selected tenderer during 2012-2013. The feasibility study should tackle the following topics:
 - a. Translate business requirements into functional analysis.
 - b. Identify and analyze technology options for the key functions (criticality, technology readiness level, technical risks, practical impact on the current situation, cost impact, time impact, Intellectual Property access and long term maintainability, SWOT, Governance model options, sustainability...).
 - c. Analyze effort, time and cost impact for different combinations of options, and compare the different selected combinations of options.
 - d. Provide a final recommendation
7. Selection of the preferred implementation option by the Commission, the TAG and the Member States Experts Group.
8. Preparation of Terms of Reference for implementing a pre-operational development, including
 - a. Defining the blueprint of the supporting framework
 - b. Implementing a pilot
 - c. Pre-operational validation and lessons learned
9. Execution of the pilot definition, implementation and pre-operational validation (including possible adaptations of the pilot). A lessons learned report is an important output of this step.
10. Formal assessment of the pilot by the Commission, the TAG and the Member States Experts Group.
11. Elaboration of the ISA Execution Report.

These phases and milestones are summarized in the following high-level planning:



1.16.9 COSTS AND MILESTONES

1.16.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Terms of Reference for study on the as-is.	50	MARE/JRC	Q3/2011	Q4/2011
Inception	Execution of study on the as-is.	300	ISA	Q4/2011	Q2/2012
Inception	eTrustEx pilot project: Development of common functionalities.	150	ISA	Q1/2012	Q2/2012
Inception	Definition of needed data model + semantics.	50	MARE		
		30	Agencies		
Inception	ISA Project Charter.	20	MARE/JRC	Q2/2012	Q2/2012
Execution	Terms of Reference for technical definition.	200	MARE/JRC	Q1/2011	Q2/2012
Execution	Technical definition: Architecture definition, and detailed	650	ISA	Q3/2012	Q3/2013

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	assessment of eTrustEx against CISE requirements.				
	Technical definition: Detailed requirements analysis, Data model, semantics issues, legal issues, governance aspects.	400	MARE		
Execution	Selection of preferred implementation option.	0		Q3/2013	Q3/2013
Execution	Terms of Reference for pre-operational pilot & validation.	200	MARE/JRC	Q3/2013	Q4/2013
Execution	Execution of the pre-operational pilot & validation: Development of key IT generic components for the CISE (e.g. common access rights module). Note that this budget will be revised at the end of the previous phases when the needs for implementation will be fully analyzed.	800	ISA	Q4/2013	Q4/2014
	Execution of the pre-operational pilot & validation: Data model, semantics, operations, governance aspects.	1.000	MARE		
Execution	Formal assessment of the pre-operational pilot.	0		Q1/2015	Q1/2015
Execution	ISA Execution Report.	50	MARE/JRC	Q1/2015	Q1/2015
	Total	3.900			

1.16.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010			
2011	Inception	300	
2012	Execution	800	
2013	Execution	800	
2014	Execution	0	

1.16.10 ANNEX AND REFERENCES

The general need for a Common Information Sharing Environment (CISE) for the EU Maritime Domain has been expressed and justified as a key component of the Integrated Maritime Policy of the EU, and developed in the following Commission Communications:

- Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Towards the integration of maritime surveillance: A Common Information Sharing Environment for the EU maritime domain, COM (2009) 538 dated 15 October 2009;
- Communication from the Commission to the Council and European Parliament on a Draft Roadmap towards establishing the Common Information Sharing Environment for the surveillance of the EU maritime domain, COM(2010) 584 dated 20 October 2010,.

The Council of the EU endorsed the guiding principles leading to integration of surveillance, asked for a Roadmap towards the CISE and subsequently supported the Commission's approach to establish a six-step draft Roadmap by means of dedicated set of conclusions:

- Council conclusions on integration of maritime surveillance, 2974th External Relations Council meeting, Brussels, 17 November 2009;
- Council conclusions on integration of Maritime Surveillance Towards the integration of maritime surveillance: A common information sharing environment for the EU maritime domain; 3092nd General Affairs Council meeting, Brussels, 23 May 2011.

The present action mainly relates and contributes to the realisation of the fourth Step of the draft Roadmap, i.e. the development of the supporting technical framework of the CISE. The steps are:

Step 1 - Identifying all User Communities.

Step 2 - Mapping of data sets and gap analysis for data exchange

Step 3 - Common data classification levels

Step 4 - Developing the supporting framework for the CISE

Step 5 - Establishing access rights

Step 6 - Ensuring respect of legal provisions

The supporting technical framework is however considered as the operational heart of the CISE to be established once the outputs of all six interlinked steps are dressed institutionally at EU level. As announced in the Roadmap, legislative proposals for the implementation of the CISE, setting out an appropriate timeframe for Member States and EU bodies to implement it should be expected by 2013-2014.

All relevant documents are referenced in the following table:

Description	Reference link	Attached document
1 Commission Communication: CISE Guiding principles	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0538:FIN:EN:PDF	
2 Commission Communication: Draft Roadmap towards the CISE	http://ec.europa.eu/maritimeaffairs/pdf/maritime_policy_action/com_2010_584_en.pdf	
3 Council conclusions Nov 2009	http://ec.europa.eu/maritimeaffairs/pdf/external_relations_council_conclusions_17112009_en.pdf	
4 Council conclusions May 2011	http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/genaff/122177.pdf	
5 Council conclusions June 2010 (para 11)	http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/genaff/115166.pdf	
6 Council conclusions Dec 2008 (para 5, page 45)	http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/gena/104617.pdf	
7 European Parliament resolution on Integrated Maritime Policy (paras 31-36)	http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2010-0386+0+DOC+XML+V0//en	
8 ECOSOC opinion, July 2010	http://www.eesc.europa.eu/?i=portal.en.ten-opinions.16088	
9 Technical Advisory Group: Terms of reference, meeting minutes, progress reports	https://webgate.ec.europa.eu/maritimeforum/frontpage?tid_2=519	

1.17 RE-USABLE INSPIRE REFERENCE PLATFORM

1.17.1 CONTEXT

1.17.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	European Commission – DG JRC
Associated Services	European Commission– DG ENV(F4), DG ESTAT (E4)

1.17.2 OBJECTIVES

To establish a reference platform and develop common components for the successful implementation of a EU spatial data infrastructure in line with the requirements of the (infrastructure for Spatial Information for Europe) INSPIRE Directive taking into consideration policies such as Digital Agenda for Europe and open data related initiatives in the Member States and the EC such as the open data portal for the Commission.

1.17.3 SCOPE

Includes:

- Inventory of existing platforms and tools spanning multiple policy areas (INSPIRE, Water Framework Directive, Digital Agenda for Europe, open data, Shared Environmental Information System (SEIS);
- Support existing or initiate new open source projects to address identified gaps;
- Produce extended multilingual documentation to help setting up the INSPIRE Infrastructure/node based on existing Member States relevant initiatives;
- Shared and collaborative platforms:
 - Generic distributed registry platform;
 - Generic volunteer geographic information (VGI) platform applied to selected INSPIRE Spatial Data Themes, software and other items (e.g. style layer descriptors).

1.17.4 PROBLEM/OPPORTUNITY STATEMENT

EU MS are currently implementing the INSPIRE directive and related regulations. Technical guidelines for the INSPIRE implementation have been developed or are currently under development. The technical guidelines are based on existing international standards. Implementations, however, often implement standards in different ways or use different versions of the relevant standards. Standards themselves evolve on a regular basis, but they are rarely coordinated with changes in other standards. These limit interoperability between systems and inhibit the ability to create a European spatial data infrastructure especially for what concerns cross-border areas.

Guidance, collaboration, sharing of best practices and approaches and reference implementation of common components to solving these interoperability issues is critical to our ability to the implementation of INSPIRE and provide support to the MS in doing so. These RP shall also enable its use in a wider context such as eGovernment, open data or digital agenda for Europe.

1.17.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
EU Member States Public Authorities, CIB	Implementation of INSPIRE requirements; increased interoperability among the public authorities

1.17.6 Related EU actions / policies

Action / Policy	Description of relation
Action/Policy description of relation Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).	Legal basis for the project.
Communication from the Commission to the European Parliament, the Council, the	DAE Action 21: Propose legislation on ICT interoperability Where relevant, the project results will provide recommendations for the revision of the

<p>European Economic and Social Committee, and the Committee of the Regions: A Digital Agenda for Europe -- COM(2010)245 final.</p>	<p>INSPIRE Directive and for the Implementing Rules legal acts still under development. Action 22: Promote standard-setting rules The results of this project will rely, where possible and feasible, on European and international standards, and will involve standardization organizations. Action 23: Provide guidance on ICT standardisation and public procurement The resulting framework will contain specifications and guidelines that facilitate public procurement. Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services.</p>
<p>Commission Regulation (EC) No 976/2009 Of 19 October 2009 implementing Directive 2007/2/EC Of the European Parliament and of The Council as regards the Network Services.</p>	<p>The project builds on the technical guidance of this regulation.</p>
<p>23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services.</p>	<p>The project builds on the technical guidance of this regulation.</p>
<p>Communication From the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions Towards a Shared Environmental Information System (SEIS) COM(2008)0046.</p>	<p>The project will directly contribute towards the implementation plan of COM(2010)0311.</p>

1.17.7 ORGANISATIONAL APPROACH

1.17.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Standardisation bodies (CEN, ISO, OGC, W3C, OASIS, etc.) including their relevant Focus Groups on e-Government	
Member States	Member States Contact Points, Initial Operating Capability Task Force (consists of representatives from MS public authorities responsible for The implementation of INSPIRE).

1.17.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
INSPIRE Conferences	INSPIRE stakeholders	Once/year (2012 Turkey)
Workshops	IOC TF	3- 4 /year
Teleconferences	IOC TF	monthly
Foss4g (FOSS4G is the global conference focused on Free and Open Source Software for Geospatial, organized by OSGeo)	Open source community, INSPIRE stakeholders	once/yr
Interoperability workshops	IOC TF, Open source community, INSPIRE stakeholders	1/yr
Specific components workshops	IOC TF, Open source community, INSPIRE stakeholders	1/yr
e-practice workshop	eGovernment	once/yr

1.17.7.3 Governance approach

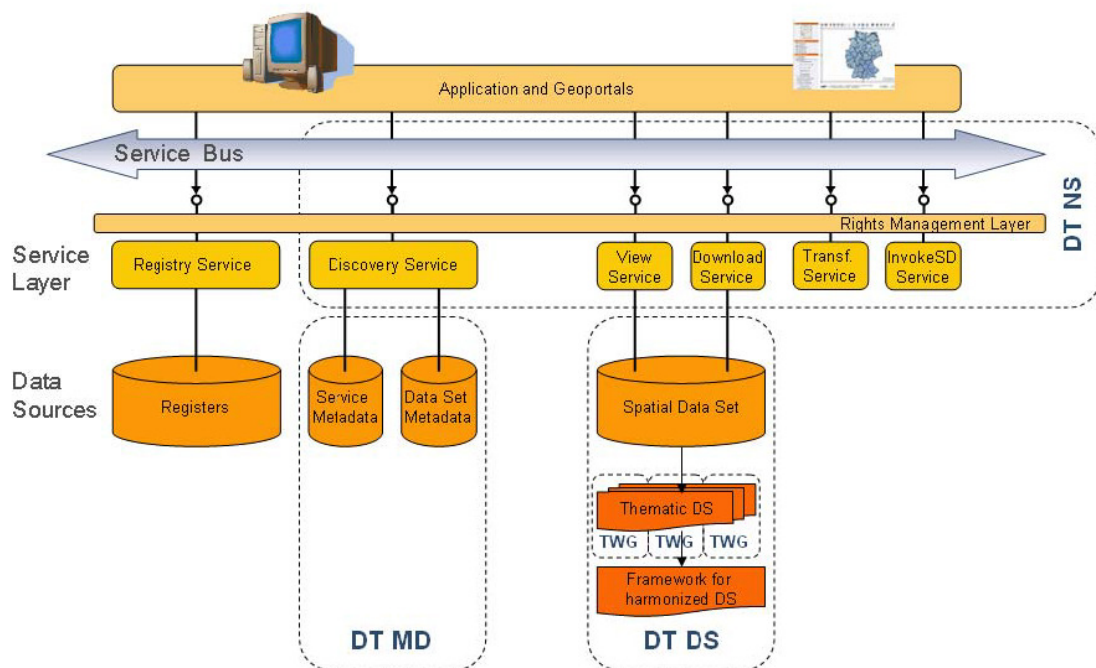
For what concerns INSPIRE existing structures such as the INSPIRE regulatory Committee the Member States Contact Points as mandated by the INSPIRE directive as well as the INSPIRE Network Services Initial Operating Capability Task Force to be replaced by an INSPIRE overarching body to address Maintenance and Evolution of the infrastructure once put in place.

It is planned to set up a Steering Committee consisting of Commission staff from DG ENV, DG ESTAT and DG INFSO for what concerns Digital Agenda for Europe.

The resources provided for this study will be complemented with Institutional resources from JRC through the Institutional Actions ENABLE 11601 and SHAPE 11602. The project will be managed by the SDI Unit of IES/JRC and will be part of the Work Programmes of the two actions above.

1.17.8 TECHNICAL APPROACH

The high-level overview of the INSPIRE technical architecture is shown below. It illustrates the required elements within the infrastructure and their relationships as well as the responsible party for drafting the relevant specification. The technical specifications of the individual elements are described in Technical Guidance documents (see references).



The goal of discovery services is to support discovery of data, evaluation and use of spatial data and services through their metadata properties. View services as a minimum, display, navigate, zoom in/out, pan, or overlay spatial data sets and display legend information and any relevant content of metadata; A download service supports download of a complete dataset or datasets, or a part of a dataset or datasets, and where, practicable, provides direct access to complete datasets or parts of datasets. Transformation Service is a special case among the recognized INSPIRE service types, as its function is to help other services in achieving compliance with the relevant INSPIRE specifications. The INSPIRE Invoke Spatial Data Services Service enables the usage of an INSPIRE Invokable Spatial Data Service within the infrastructure of INSPIRE Network Services by supporting the binding (i.e. invocation) of one (or several) INSPIRE Spatial Data Service(s) into a service or an application similar to accessing the other INSPIRE Network Services.

In addition to the above there are additional components that are needed for the correct functioning of the infrastructure such as registers.

The above elements are the main subject of this proposal. To create a reusable reference platform with the core components identified above it is planned to do the following:

- Inventory of
 - Existing INSPIRE components from the Open Source community;
 - Components used within the Member States to implement INSPIRE;
 - Missing components (e.g. registries, volunteered geographic information platform);
- Selection of other policies and initiatives from other sectors requiring exchange and sharing and maintenance of spatial data sets and services;
- Selection of the missing components and/or functionalities. Multilingual support is envisioned where required;
- Support Open Source projects to develop the missing items and produce the related documentation (installation guides and technical documentation in several languages);
- Selection and development where required of conformance test suites;
- Set up a collaborative platform to share and maintain the components.

1.17.9 COSTS AND MILESTONES

1.17.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Inventory	150	ISA	Q4/2012	Q2/2013
Inception	Target policies & components	100	JRC	Q3/2012	Q3/2013
Execution	Development of missing items	800	ISA	Q4/2013	Q1/2015
Execution	Conformance suites	100	ISA	Q4/2013	Q4/2014
Execution	Development of collaborative platform	100	ISA	Q4/2012	Q4/2014
Operational	Collaborative platform	100	ISA	Q1/2015	Q4/2015
	Total	1.350			

1.17.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2011			
2012	Inception	150	
2012	Execution	100	
2013	Execution	900	
2014	Collaborative platform	100	

1.17.10 ANNEX AND REFERENCES

description	Reference link
Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32007L0002:EN:NOT
INSPIRE Metadata Regulation	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008R1205:EN:NOT
Commission Regulation amending Regulation (EC) No 976/2009 as regards download services and transformation service	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:02009R0976-20101228:EN:NOT
COMMISSION REGULATION implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:323:0011:0102:EN:PDF
COMMISSION REGULATION amending Regulation 1089/2010 as regards interoperability of spatial data sets and services	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011R0102:EN:NOT
Technical Guidance for the implementation of INSPIRE Discovery Services	http://inspire.jrc.ec.europa.eu/documents/Network_Services/TechnicalGuidance_DiscoveryServices_v3.0.pdf
Technical Guidance for the implementation of INSPIRE View Services	http://inspire.jrc.ec.europa.eu/documents/Network_Services/TechnicalGuidance_ViewServices_v3.0.pdf
Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Towards a Shared Environmental Information System (SEIS) {SEC(2008) 111} {SEC(2008) 112}	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52008DC0046:EN:NOT

1.18 FEDERATE MANAGED AUTHENTICATION SERVICES FOR ECAS

1.18.1 Context

1.18.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common Services
Service in charge	DIGIT.A3
Associated Services	

1.18.2 OBJECTIVES

The objective of the proposed project would be to extend the ECAS multi-factor authentication with a federated solution: user identified by a trusted third party and credentials transmitted to EC to login to authorized applications in case the user is a public official and the application aims at usage by an administration. The administration of authorization rights could be handled in the national portals and then connected and transferred to ECAS. It is placed within the ISA objectives of establishment and improvement of common frameworks in support of interoperability across borders and sectors. It builds on and extends the existing ECAS-STORK integration from natural person authentication to federated role-based access and authorization, such as asserting a public administration's authorized representative.

1.18.3 SCOPE

The scope of the project would include an overview of existing approaches in the Member States, choosing a suitable model, definition of common, generic specification and the technical implementation of the chosen model; these projects steps should face the needs of a federated identification solution, especially the risks and concerns of heterogeneous solutions within Europe and potential architectural approaches to fulfil the needs of trust and security.

1.18.4 PROBLEM/OPPORTUNITY STATEMENT

The problem seen in different external SSO scenarios is the role based authentication – a user is granted a role within the system but how to connect the roles to other portals and/or applications? Which are the appropriate technical and organisational specifications for providing a reasonable external authentication system? The ECAS integration has shown with STORK the subject of

handling natural persons and is now missing the adoption and enlargement for roles within non natural persons as far as they are public administrations. For different ECAS-connected applications of the EC, it might not be relevant whether a user is Mr. X or Mrs Y, but that the user is a proper authorized representative of a specific entity (the European Commission or National administration etc.) and is acting in a special role. Therefore, it would be perfectly sufficient for the application to receive credentials by a “trusted third party” (the responsible national administration). Thus, the attribution of a specific user to a specific entity would be done by that entity itself; the application – via ECAS – would trust this entity; this approach would also help to avoid ‘triple management of users and roles’: MS at national level for internal needs and for ECAS evidence and update needs as well as the managing of the users and roles in the ECAS system itself.

1.18.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
EC	Delegation of authorization tasks to MS
MS	Usage of national models for authorization tasks with ECAS solution
Administrations	Local, self administration
Third Parties	In general, this project is aiming A2A communication but could be a pattern for A2B (or B2B) communication integration at a later stage.

1.18.6 Related EU actions / policies

Action / Policy	Description of relation
ISA	TIE – register integration, ECAS, authentication issues IA – interoperability architecture & services
eGov action plan	Examples: Priority 1.2: Collaborative Production of Services - Action 4: Exchange of knowledge and expertise, agreement on common targets for the roll out of collaborative services Priority 3.2: Reduction of Administrative Burdens - Action 29: Sharing of experiences on implementation of the ‘once-only’ registration principle and on electronics procedures and communications, cost-benefit analysis and roadmap design Priority 4.1: Open Specifications and Interoperability - Action 32: Put into action the European Interoperability Framework (EIF) and the European Interoperability Strategy (EIS) - Action 33: Exchanges of expertises, promotions of the re-use and sharing solution to implement interoperable eGovernment services

	Priority 4.3: Innovative eGovernment - Action 40: Pilot projects for innovative architecture and technologies in eGov ...
Digital Agenda - Interoperability and Standards - Trust and Security - ICT for Social Challenges	Examples: Action 26: Member States to implement European Interoperability Framework Action 54: Develop a new generation of web-based applications and services Action 89: Member States to make eGovernment services fully interoperable ...

1.18.7 ORGANISATIONAL APPROACH

1.18.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	CIOs of national initiatives / eGovernment strategy
EC	Heads of DGs & responsible people from DGs according to the tasks out of eGov action plan and ISA program

1.18.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Workshop(s)	CIOs national	3 times
Workshop(s)	EC / DGs, ISA Working Group on Interoperability Architecture	2-5 times

1.18.7.3 Governance approach

Definition of a Core working group and Project Management Board (EC DGs & MS representatives) to evaluate and support the project aim – 4/5 meetings planned, either face to face meetings or also Webinars possible (at the beginning of the project: 1st definition of surveys for approaches of MS, 2nd: evaluating the results of the surveys and defining a plan for general model, 3rd: choosing a model to fulfil the project aims and provide an implementation plan, implementation – choosing ‘Testing’-MS with different technical backgrounds, adding other MS with different technical backgrounds, ...; 4th: review phase of project and existing results).

1.18.8 TECHNICAL APPROACH

Elements to consider: existing National systems as good practices, ECAS, open interfaces, SAML, STORK.

eGovernment can only function efficiently when public authorities work closely together and cooperate on an administration-wide scale. This happens when government portals team up with each other to form a “portal group” and share the existing infrastructure.

The advantage of the portal group concept is that many applications are available from a single entry point. The user only needs to identify him once when he first logs on to the portal in order to access various resources, information sources, or “digital offices”. The technical term for only requiring the user to sign in once is called “single sign on”.

Within the portal group, data applications from one authority can be made accessible to other authorities on the basis of a common use and security agreement and a standardised portal group protocol (SAML Profile). The portal group system allows participating organisations to use their own user management systems on the so-called base portal to access external applications. The operators of these applications can delegate the job of authenticating and authorising users to other portals. The operator defines access rights in accordance with the relevant statutory provisions for data protection. Access rights are granted to administrative units only, not to individual users. For individual users, roles are defined that users can be added to. Human resources grants access rights via roles to internal users according to their area of responsibility. This has the advantages that it reduces the effort on the side of the application because it does not have to carry out user management. It also eliminates the need for multiple parallel user directories. In addition, single-sign-on is more convenient for users and makes the application easier to use.

Participation in the portal group is governed by an Arrangement concluded between the participating entities. This arrangement sets out the rights and duties with which the joining partners must comply, such as carrying out user identification at login or other data security measures. Local authority bodies, public-law entities and other institutions performing public functions may also join the portal group.

The common protocol forms the technical basis of the portal group. It supplements the organisational issues covered in the arrangement with technical details on the transmission of authentication and authorisation data. Other details include the protocol parameters, the link to HTTP or SOAP, the portal architecture, error messages, URL conventions and generic role definitions.

1.18.9 COSTS AND MILESTONES

1.18.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Feasibility study: Legal, Semantic & Technical Approaches in Member states overview of existing approaches in MS.	150	ISA	Q1/2012	Q3/2012
Inception	Architectural and Functional SWOT e.g. for Federation of Portal / Portal group Project in A.	75	ISA	Q3/2012	Q4/2012
Execution	definition of common, generic specification choosing of a suitable model.	150	ISA	Q1/2013	Q3/2013
Execution	Providing necessary gateway, transformation services to connect ECAS to national solutions.	300	ISA	Q3/2013	Q2/2014
Execution	Implementation plan for integration of MS solutions.	150	ISA	Q3/2013	Q4/2013
Execution	Lessons learned, ...	50	ISA	Q3/2014	Q4/2014
	Total	875			

1.18.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		0	
2011		0	
2012	Inception	225	
2012	Execution	15	
2013	Execution	300	
2014	Execution	335	
2015			

1.18.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

2. INTEROPERABILITY ARCHITECTURE

2.1 ELABORATION OF A COMMON VISION FOR AN EUROPEAN INTEROPERABILITY ARCHITECTURE (EIA)

2.1.1 Context

2.1.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common frameworks
Service in charge	DG DIGIT/B2
Associated Services	Concerned Commission services

2.1.2 OBJECTIVES

As stated in ISA legal basis in:

- Article 3:

"Activities

The ISA programme shall support and promote:

(a) the establishment and improvement of common frameworks in support of cross-border and cross-sectoral interoperability; ..."

"... (c) the operation and improvement of existing common services and the establishment, industrialisation, operation and improvement of new common services, including the interoperability of public key infrastructures (PKI)..."

- Article 7:

"Solutions

1. Common frameworks shall be established and maintained by means of studies...."

The objective of this action is:

- to work with the Member States and the concerned Commission services towards a joint vision on a European Interoperability Architecture (EIA) for European Public Services (its scope, the articulation of the main architectural building blocks and the need for interface standards between such architectural building blocks).

- to assess the need and the relevance of having common infrastructure services.

A first version of this common vision for an EIA has been elaborated in 2011 together with a list of Reference Interoperability Agreements (RIA).

The common vision will be implemented through various ISA actions and other initiatives. Nevertheless both the RIA and EIA need to be tested on concrete projects to prove their usefulness and to be further developed and kept up to date to ensure their take up by Commission services and by Member States.

2.1.3 SCOPE

This action belongs to the Interoperability architecture cluster. The activities range from updating the RIA and the common vision for an EIA based on lessons learnt from sectoral projects or from large scale pilots to monitoring the contribution of ISA interoperability actions and other projects to the implementation of the common vision for the EIA. The activities might also include the development of tools such as a template for describing interoperability agreement, guidelines on how to use the RIA ...

2.1.4 PROBLEM/OPPORTUNITY STATEMENT

During the elaboration of the EIS Member States and Commission services agreed that there was:

- at conceptual level, a lack or insufficient :
 - architectural guidelines for cross-border interoperability building blocks;
 - concrete and reusable, use-case-based interoperability guidelines, rules and principles on standards, architecture, and specifications on how to develop information exchange between ICT systems;
 - concrete implementation guidelines.

- at operational level, a lack or insufficient:
 - common infrastructures (i.e. an Interoperability Platform or a European Enterprise Service Bus (EESI)) at EU level for providing generic and standardised services at EC level (i.e. PKI, eID, eAuthentication, eAuthorisation).

2.1.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	Better efficiency in establishing European Public Services

Beneficiaries	Anticipated benefits
European Commission Services	Better efficiency in establishing European Public Services

2.1.6 Related EU actions / policies

Action / Policy	Description of relation
EIS	Action part of the interoperability architecture cluster
ISA actions	All ISA actions which contribute to the implementation of the common vision for the EIA

2.1.7 ORGANISATIONAL APPROACH

2.1.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	The ISA Working Group on Interoperability Architecture.
Commission Services	A representative from each concerned Commission service.
ICT Industry	Representatives of ICT industry, SMEs, ...
Standardisation bodies	Representatives from standardisation organisation for a and consortia.
Local and regional public administrations	Representatives from local and regional public administration European representative organisations such as Council of European Municipalities and Regions, Eurocities, ...

2.1.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
ISA IA WG		Around 4 meetings per year

2.1.7.3 Governance approach

This action will be run in close collaboration with the ISA working group on Interoperability Architecture and with the concerned Commission services.

2.1.8 TECHNICAL APPROACH

The study will encompass:

- Define RIA and EIA governance processes, roles, responsibilities and missions;
- Ensure strategic alignment of RIA and EIA with the EIS;
- Define, maintain and improve the RIA and the common vision for an EIA;
- Translate the EIA common vision into executable projects;
- Assessment of contributions of projects to the EIA.

The study will be followed by implementation activities such as agreeing on common guidelines specifying in more practical details the RIA and the EIA architecture (interoperability agreements templates, RIA and EIA main components and common interfaces) and, if relevant, the common infrastructure services.

2.1.9 COSTS AND MILESTONES

2.1.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Study	Interoperability Architecture	500	ISA	Q3/2010	Q3/2011
Study	Reference Interoperability Agreements and European Interoperability Architecture governance	300	ISA	Q4/2011	Q4/2012
	Reference Interoperability Agreements and European	600	ISA	Q1/2013	Q4/2015

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	Interoperability Architecture				
	Total	1.400			

2.1.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		500	499
2011		300	
2012		150	
2013		150	
2014		150	
2015		150	

2.1.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

2.2 CAMSS - COMMON ASSESSMENT METHOD STANDARDS AND SPECIFICATIONS

2.2.1 Context

2.2.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common frameworks
Service in charge	DG DIGIT / ISA Unit
Associated Services	DG INFSO, DG ENTR

2.2.2 OBJECTIVES

The objective of the CAMSS action is to implement and plan the maintenance of a framework for assessing interoperability standards and specifications.

The purpose of the Framework will be:

- To ensure that assessments of formal ICT specifications and interoperability profiles are performed to high and consistent standards;
- To ensure that assessments contribute to the interoperability of systems implementing these specifications and profiles;
- To enable the re-use, in whole or in part, of such assessments;
- To continuously improve the efficiency and effectiveness of the assessment process for ICT formal specifications and interoperability profiles.

These are addressing the ISA programme, Decision No 922/2009/EC of the European Parliament and of the Council, in general and specifically article 3 (a) "the establishment and improvement of common frameworks in support of cross-border and cross-sectoral interoperability" and article 4 (a) "technological neutrality and adaptability;" (b) "openness;" and (c) "reusability;"

2.2.3 SCOPE

The Interoperability Architecture cluster in the European Interoperability Strategy (EIS) proposes, inter alia, providing guidance on interoperability architecture domains of shared Member State interest and the need for common interface standards.

The Commission's White Paper on 'Modernising ICT Standardisation in the EU - The Way Forward' states that "to facilitate the use of the best available standards in support of European legislation and policies it is necessary to lay down requirements, in the form of a list of attributes, for such standards and their associated standardisation processes".

The White Paper also suggests that when defined within the context of ICT strategies, architectures and interoperability frameworks, the implementation of standardised interfaces can be made a requirement in public procurement procedures, provided the principles of openness, fairness, objectivity and non-discrimination and the public procurement directives are applied. Public authorities need to be able to define their ICT strategies and architectures, including interoperability between organisations, and be able to procure ICT systems / services and products or components thereof, that meet their requirements.

According to the European Interoperability Framework (EIF) the "decisions on what formalised specifications and technologies to use to ensure interoperability for European public services should be based on transparency, fairness and non-discrimination. One way to do this is to agree on a common assessment methodology and selection process." This means that a common methodology to use in the assessments of formalised specifications relevant to the eGovernment business needs could be defined to support the development of European public services.

The assessment and implementation of formalised specifications, including standardised interfaces, should follow commonly acceptable principles. They should also be based on open, common and unbiased criteria. When making assessments the main emphasis should be on the business needs, but also aspects such as maturity, market support and openness are important. Selection and assessment of relevant specifications for public administrations' business needs is often difficult, complex and time consuming. To help Member States in these assessments of formalised specifications, for public procurement, architecture planning and other purposes, the Commission's ISA programme includes action CAMSS – 'Common assessment method for standards and specifications'.

CAMSS action offers a neutral and unbiased method to assist Member States in their assessments of formalised specifications needed in the development of interoperable national and cross-border eGovernment services. CAMSS aims to provide a framework, which would ensure that public administrations can assess and select the most relevant interoperability standards for their needs.

2.2.4 PROBLEM/OPPORTUNITY STATEMENT

Within the context of the elaboration of their National Interoperability Frameworks, Member States need to define interoperability architecture domains and standardised interfaces. The same is true when various Member States want to link up their systems in order to establish cross-border European public services.

Decisions and recommendations concerning formal specifications often call for resource intensive and time consuming assessments. By following a common assessment process and criteria, and by sharing and re-using assessments done in other Member States, the burden of assessment could be made easier. Also assessments made by Member States could be, at least partially,

shared and re-used utilizing the CAMMS assessment library. This would provide Member States new collaboration opportunities in the development of interoperability.

The common framework would provide guidance on the assessment of ICT standards and specifications when defining ICT architectures and establishing European public services. The framework would also ensure transparency and openness of the assessment process and could lead to better decisions regarding ICT standards and specifications.

2.2.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations, Standardisation Bodies and ICT Services Industry	<p>A commonly agreed assessment method, assessment process and a list of assessment attributes brings transparency to the selection of standards in the context of ICT strategies, architectures and interoperability frameworks. The re-use and sharing of completed assessments reduces resources and time needed, when establishing, maintaining and commenting on Interoperability Statements.</p> <p>Using CAMSS offers the following main benefits:</p> <ul style="list-style-type: none"> ○ A clear guideline that allows the assessments of formalised specifications to be made consistently and in high quality by applying neutral, unbiased and transparent criteria. ○ Helps Member States to make interoperability agreements based on formal specifications, by providing a common assessment method for these needs. ○ Helps Member States to assess formalised specifications in public procurement. ○ Re-use of assessments, in whole or in part. Avoids duplication of effort, for the already finalised assessments of formalised specifications can be shared. ○ The assessed formalised specifications will contribute to the interoperability of systems implementing these specifications. ○ The possibility of more efficient use of public funds, because of easier and faster assessments and a CAMSS library to reuse formalised specifications meant for similar business needs. ○ Improvement of the expertise of civil servants working with formalised specifications. ○ Offers a complimentary tool to support European Interoperability Framework in the evaluation of European or national interoperability standards and specifications

2.2.6 Related EU actions / policies

Action / Policy	Description of relation
Digital Agenda Action 21 & 22	Alignment to be ensured between renewed ICT standardisation procedures and CAMSS
Digital Agenda Action 23	Alignment to be ensured between new ICT standards related procurement guidelines and CAMSS

2.2.7 ORGANISATIONAL APPROACH

2.2.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	ISA Committee, ISA Coordination Group, ISA Interoperability Architecture Working Group, Ad Hoc Group if necessary
Standardisation bodies	ICT Standardisation Steering Committee (DG ENTR ICT/SC), Standardisation bodies
ICT industry	ICT industry, relevant associations

2.2.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
ISA Groups	Member States	4 times per year
ICT / SC meetings	Standardisation bodies	2 times per year
Public consultations	Standardisation bodies, ICT industry	2 times per year

2.2.7.3 Governance approach

The Commission collaborates with Member States to transpose the work done under IDABC into a comprehensive CAMSS framework. The Commission coordinates consensus building around CAMSS, and all relevant stakeholders will be consulted. Alignment between CAMSS and related

EU actions and policies will be ensured by close interdepartmental collaboration inside the Commission. The proposal for the organisation and future governance of CAMSS, including the assessment library, will be planned as part of the implementation of the action. The action is managed by DG Digit's ISA Unit and a contractor will help in the implementation of the action.

When CAMSS action is implemented its governance needs to be organised to guarantee the sustainability of the action results. As ICT standardisation is a rapidly changing and expanding area, a sustainable governance of further development of CAMSS is essential. Also CAMSS assessment library needs to be maintained and updated frequently. The sustainable governance structure of CAMSS is to be planned in conjunction with the holistic sustainability governance planning for ISA actions.

2.2.8 TECHNICAL APPROACH

N/A

2.2.9 COSTS AND MILESTONES

2.2.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Coordinating consensus building around CAMSS and standardisation related EU actions with stakeholders. Planning the execution.	0	n.a.	Q1/2010	Q2/2011
Execution	Transposing the CAMSS work done under IDABC into a comprehensive framework. Planning the organisation structure and governance of CAMSS for maintenance and further development.	150	ISA	Q3/2011	Q2/2012

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Deployment	Deployment of CAMSS method utilisation and organising CAMSS library governance in collaboration with related ISA actions (e.g. Joinup). If necessary, further refinement of CAMSS based on feedback from stakeholders.	200	ISA	Q3/2012	Q2/2013
	Total	350			

2.2.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		-	
2011		150	
2012		200	
2013			
2014			
2015			

2.2.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
White paper - Modernising ICT Standardisation in the EU: the Way Forward	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0324:EN:NOT	

Description	Reference link	Attached document
Decision No 922/2009/EC of the European Parliament and of the Council on ISA.	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:260:0020:01:EN:HTML	

2.3 PKI SERVICES

2.3.1 Context

2.3.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common Services
Service in charge	DG DIGIT
Associated Services	AGRI, BUDG, COMP, DIGIT, ECFIN, ECHO, EMPL, JLS, TAXUD, TRADE

2.3.2 OBJECTIVES

The objective is ensuring the operation of PKI services established under the IDA and IDABC programmes. These services can be used by Commission services and agencies for cross-border use in projects involving the trusted exchange of information between Member States and EU Institutions.

2.3.3 SCOPE

The scope of this project is to provide application-layer security to allow trusted exchange of information between Member State competent authorities and European institutions or agencies by using public key infrastructures (PKI) certificates from a single source.

2.3.4 PROBLEM/OPPORTUNITY STATEMENT

These and previous (IDA, IDABC) PKI Services have been conceived as a temporary solution, awaiting interoperable national PKI Services. The PKI Services are used for Closed User Groups (CUGs) to protect the information exchanged under various regulations.

2.3.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Relevant national competent authorities or agencies	Ability to use these services for the increased security of their data exchange.
EU Institutions and agencies services	Ability to use these services for the increased security of their data exchange.

2.3.6 Related EU actions / policies

Action / Policy	Description of relation
Community framework for electronic signatures	Directive 1999/93/EC defines the legal framework for (qualified) electronic signatures.

2.3.7 ORGANISATIONAL APPROACH

2.3.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
EU Institutions and Agencies Services	Project officers

2.3.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?

2.3.7.3 Governance approach

Certificates can be ordered by EU Institutions and agencies for a duration that does not go beyond the duration of the ISA PKI project. EU Institutions and agencies are themselves responsible for the sustainability of their own projects.

2.3.8 TECHNICAL APPROACH

Under this action a (PKI) infrastructure will be put in place in the framework of ISA that can inter alia (1) run CUGs both connected to the internet and to sTESTA and (2) issue TLS/SSL server certificates, in order to replace the infrastructure that was built under IDA and IDABC for this purpose. It is envisaged that a framework contract will be signed, allowing the services and agencies to order CUGs and certificates that use the common infrastructure, in order to allow their projects to exchange information in a trusted way.

The provision of certificates shall not be financed by the programme, but rather by the services or agencies themselves. The programme is proposed to cover the fixed-cost component, such as the initial infrastructure set-up and the connection to sTESTA.

2.3.9 COSTS AND MILESTONES

2.3.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Infrastructure	25	ISA	Q3/2010	Q2/2014
Operational	Certificates	315	Services / Agencies	Q3/2010	Q2/2014
	Total	340			

2.3.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Operational	300	6

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2011	Operational	25	
2012	Operational	5	
2013	Operational	5	
2014	Operational	5	
2015			

2.3.10 ANNEX AND REFERENCES

Description	Reference link
Commission Decision of 16 August 2006 C(2006) 3602 concerning the security of information systems used by the European Commission.	http://ec.europa.eu/internal_market/imi-net/docs/decision_3602_2006_en.pdf
Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signatures.	http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&numdoc=31999L0093&model=guichett

2.4 DATA COMMUNICATION NETWORK SERVICE (STESTA)

2.4.1 CONTEXT

Type of Action	Project
Type of Activity	Common Services
Service in charge	DIGIT.C.2
Associated Services	

2.4.2 OBJECTIVES

The sTESTA network service is the continuation of an existing action of the IDA and IDABC Programme. A number of sectoral networks are currently using the sTESTA services for their sectoral applications (OLAF, DG TREN, DG ESTAT, DG JLS, DG SANCO, CDT, DG FISH, DG ENV and DG TRADE). The network is also used by the European Institutions and the European agencies. In addition the sTESTA framework is also extensively used by DG JLS for the implementation of the SIS II network and EUROPOL for the implementation of their own dedicated EUROPOL network. sTESTA is also used in the context of non-Community projects by Member State administrations or organisations acting on their behalf under certain conditions as described in the sTESTA Memorandum of understanding.

sTESTA is currently focussing on the following objectives:

- Connectivity: The provision of a highly available, extendable, flexible and secured communication infrastructure between public administrations in Europe, so that current and future communication needs between these administrations can be covered;
- The consolidation of existing data networks currently spread over different contracts and independently managed by other Institutions or European bodies;
- Security: The provisioning of a secured, RESTREINT UE accredited communication infrastructure;
- Support: Provision of a single support infrastructure that can act as a single entity for trouble shooting, support to sectors and administrations, alert management and reporting;
- Management: The overall project management as well as service management and administrative management of the sTESTA networking services;
- Assistance: The provision of assistance services dedicated to control and audit of the operational networking services.

2.4.3 SCOPE

The objective of sTESTA (secured Trans European Services for Telematics between Administrations) is to exchange electronic data between administrations in Europe in a secure,

reliable and efficient way. It is foreseen that both unclassified and classified information can be exchanged. It is dedicated to inter-administrative requirements and is providing guaranteed performance levels and security.

Facilitate cooperation between public administrations, create interoperability at the EU level through shared quality solutions and consolidating existing networks by providing a secure reliable and flexible building block are the main driving forces for the new sTESTA call for tenders. Depending on the user requirements that are currently examined in an ongoing study the current sTESTA services might be subject for revision.

2.4.4 PROBLEM/OPPORTUNITY STATEMENT

Currently a consultancy office is performing a study on sTESTA. The goal of this study is to establish the sTESTA user needs and to look into confidentiality, integrity and availability requirements reconsidering the original sTESTA requirements in preparation of the sTESTA future evolutions.

Depending on the outcome of the study, current objectives including the technical implementation of sTESTA might be subject for change.

2.4.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Specific sectors	Ability for sectors and agencies to use a secured trans European network service for the exchange of data with specific availability or security requirements over a shared quality solution. Prevents proliferation of uncontrolled networks.
Member States' public administrations	Ability for MS administrations to use a secured trans European network service for the exchange of data with specific availability or security requirements, with EU Institutions, EU agencies and other MS administrations. The provided solution is managed and the access points are under control of the MS administrations.
EU institutes and agencies	Avoids the unnecessary implementation of costly shadow network infrastructures.
Non-community programs	sTESTA can be used in the context of a non-Community project by Member States administrations or organisations acting on their behalf under certain conditions described in the sTESTA Memorandum of understanding. It stimulates the re-usage of an existing infrastructure.
Citizens and enterprises	Citizens and enterprises are out of the scope of the sTESTA networking services but are indirectly benefiting due to the protection of the personal data on the level of the network.

2.4.6 ORGANISATIONAL AND TECHNICAL APPROACH

The sTESTA approach is collaborative: it builds on national efforts to establish national, regional or local administrative networks by forging these to a trans-European network. In this so called domain based approach, every connected domain will have to fulfil the necessary security, performance and organisational requirements in order to obtain a full access to the sTESTA network. In addition to the default setup, administrations might decide to implement additional access points and closed user groups or secured network services on the existing sTESTA infrastructure. The budgetary impact of such a decision will fall under their responsibility. The sTESTA network is controlled and supported by a central support and operation service, responsible for all operational issues, including the security management of encryption devices.

DIGIT C2 responsible for network infrastructure services at the European Commission has the organisational and contractual control over the execution of the sTESTA contracts. This organisational approach guarantees the operational and technical sustainability.

The sTESTA contract will end in Q3 2013. Due to the complexity of the provided services and the multiple communities that are served, a migration period of 2 years starting in 2012 is foreseen. During this migration period the continuity of the current sTESTA services needs to be guaranteed. Therefore, as from 2012 additional budget will need to be foreseen in order to build critical parts of the new sTESTA network.

For the security accreditation of the classified part of the sTESTA network, the Commission Policy Advisory Group (CSPAG) has established the Security Accreditation Panel (SAP) in accordance with Commission Decision 2001/844/EC, ECSC, EURATOM (OJ L 317, 3.12.2001, p. 1). The SAP, which has been mandate to issue the final accreditation statement, granting approval to handling EU Classified Information up to the level of RESTREINT UE in its operational environment, is expected to meet twice a year. Furthermore, three workshops are expected to be held yearly to coordinate sTESTA activities with sTESTA stakeholders.

2.4.7 COSTS AND MILESTONES

2.4.7.1 Breakdown of anticipated costs and related milestones

Phase:	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Study sTESTA requirements	500	IDABC	Q4/2009	Q2/2010
Operational	Continuation of the current sTESTA services	9.000	IDABC	Q4/2009	Q3/2010
Operational	Continuation of the current sTESTA services	12.400	ISA	Q4/2010	Q3/2011
Operational	Continuation of the current sTESTA services + migration setup sTESTA follow up	17.800	ISA	Q4/2011	Q3/2013
Operational	Continuation of the new sTESTA services	29.400	ISA	Q4/2013	Q3/2016
	Total Budget	69.100			

2.4.7.2 Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	12.400	12.775
2011	8.800	
2012	9.600	
2013	9.600	
2014	9.600	
2015	9.600	

2.5 CIRCABC

2.5.1 Context

2.5.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common services
Service in charge	DG DIGIT A3
Associated Services	DG DIGIT.C

2.5.2 OBJECTIVES

CIRCABC (Communication and Information Resource Centre for Administrations, Businesses and Citizens) is used by Member States and is also available as a central service hosted by the European Commission. Therefore, it allows easy cross-border and cross-sector interactions and is a reference in this context.

The objective of this submission is to enable service continuity, guarantying a reliable and effective service including support to end-users.

2.5.3 SCOPE

CIRCABC enables widespread collaborative groups to share information and resources in private workspaces. It is an open-source multilingual application offering distribution and management of documents in any format, with fined grained security. It includes version control, management of translations, multilingual search, forums and is widely accessible to users with disabilities (WAI compliance).

CIRCABC contributes to the implementation of many EU priority sectors both inside Institutions and in Member States by providing them with a trustable and easy to use collaboration and information exchange.

As reported by the EIS study, CIRCABC's architecture and its availability under the EUPL license, enable its reuse as an interoperable building block for other solutions and services in the Commission as well as in Member States. It can also be deployed as a standalone alternative in EU Administrations or Businesses.

2.5.4 PROBLEM/OPPORTUNITY STATEMENT

The CIRCABC service and the CIRCABC OSS version, disseminated via the OSOR source forge, are already used by several Institutions, administrations and businesses. CIRCABC is necessary for these bodies to continue their mission and it is therefore critical to sustain this service and continue to deliver up-to-date OSS versions.

Moreover, Business and policy makers have to be more and more reactive with stakeholders contributing from all around the world. The collaborators are in need of intuitive, reliable and modern tools suited to the fast pace they are confronted with and will favour automated and productivity tools enabling them to concentrate on their core business and activities.

Migration from CIRCA to CIRCABC started in 2010 in agreement with all the Interest Groups Leaders and CIRCA will be phased out when the migration is agreed to be successfully completed.

CIRCABC key figures:

- CIRCABC downloaded more than 800 times on OSOR.eu
- 16th on 64 top download OSS
- 6th on 100 most viewed OSOR.eu pages
- 7th most active in OSOR.eu
- 1st in number of posts in OSOR.eu
- Around 4000 groups will be migrated from CIRCA to CIRCABC
- Around 1200 Service Help-Desk calls in 2010

2.5.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Institutions	CIRCABC service is readily available to the European Institutions to ease the collaborative work around policy and projects along the lifecycle of documents.
Member States' public administrations	Member State public administrations can also benefit from the CIRCABC service either for the collaboration within the EU framework or for other purposes or decide to deploy the OSS version in their services.

2.5.6 Related EU actions / policies

Action / Policy	Description of relation
IPM	Interactive Policy Making, another ISA action

2.5.7 ORGANISATIONAL APPROACH

2.5.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
ISA programme management	DIGIT.B2 (Margarida ABECASIS)
European Institutions, Member State Administrations	ISA management committee, ISA working group
DIGIT A	Christos ELLINIDES, Jose MARIN, Laurent BUNIET, Benoît ORIGAS
DIGIT C	Marcel JORTAY

2.5.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
User Group Conference	Laurent BUNIET, Benoît ORIGAS, Margot FASSIAN	Once a year
2011 NIDBS CIRCABC conference	Laurent BUNIET, Benoît ORIGAS	November 2011

2.5.7.3 Governance approach

The project is managed by DIGIT A and contracts external resources for service management, maintenance, community management and help-desk support. DIGIT A provides a Project Responsible and a Project Manager, both Officials in the unit.

A User Group community will be created around the CIRABC service and regular meetings will provide the opportunity to submit enhancements requests, exchange opinions and best practices.

2.5.8 TECHNICAL APPROACH

CIRCABC is delivered as an OSS via OSOR, the Forge made available by ISA.

The OSS community has the possibility to actively contribute at the source code level.

2.5.9 COSTS AND MILESTONES

2.5.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Continuation of the current CIRCABC Service	2.008	ISA	Q3/2010	Q4/2015
Operational	Communication & Training	145	ISA	Q1/2010	Q4/2015
	Total	2.153			

2.5.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Operational	183	200
2011	Operational	350	
2012	Operational	300	
2013	Operational	440	
2014	Operational	440	
2015	Operational	440	

2.5.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
CIRCABC Service	https://circabc.europa.eu/	

Description	Reference link	Attached document
CIRCABC OSS project on OSOR.eu	http://www.osor.eu/projects/circabc	

2.6 INTERACTIVE POLICY MAKING (IPM)

2.6.1 Context

2.6.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common Services
Service in charge	DG DIGIT
Associated Services	DG MARKT (European Business Test Panel (EBTP) / Service Directive)

2.6.2 OBJECTIVES

The IPM (Interactive Policy Making) service deployed by DIGIT is widely used by the Institutions and in Member States. It enables to easily collect key information for decision making processes and implementation of cross-border and cross-sector activities.

The objective of this submission is to sustain the service availability guarantying a reliable and effective service including support to end-users.

2.6.3 SCOPE

IPM (Interactive Policy Making) enables the creation of surveys and the collection of answers via a web based user interface. It is an open-source multilingual application which is widely accessible and provides support for either identification or anonymity, depending on the survey requirements.

IPM is the ideal tool for quickly and reliably poll opinions from a widespread community, guiding them throughout the contribution process. It contributes to the implementation of many EU priority sectors like the policy making for DG MARKT Service Directive or EBTP (European Business Test Panel) but also to many other various types of surveys.

As IPM is available from a software source forge (currently OSOR.eu) under the EUPL license, it can also be installed anywhere as a standalone application or reused as a component of another Information System.

2.6.4 PROBLEM/OPPORTUNITY STATEMENT

The IPM service and the IPM OSS version disseminated via the OSOR source forge are already used by many Institutions, administrations and businesses. IPM is necessary for these bodies to continue their mission and it is therefore critical to sustain this service and continue to deliver up-to-date OSS versions.

Business and policy makers have to be more and more reactive and need to gather reliable information while the stakeholders are contributing from all around the world. The contributors are in need of intuitive, reliable and modern tools suited to the strict data collection rules they are confronted with and will favour automated and productivity tools enabling them effortlessly to answer surveys and to concentrate back on their core business and activities.

IPM key figures:

- 22nd on 64 top download OSS
- 17th on 100 most viewed OSOR.eu page
- 4th in number of posts in OSOR.eu
- 1278 surveys in 2010
- 1200+ Service Help-Desk calls in 2010

2.6.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Institutions	IPM service is readily available to institutions for the creation of surveys and the management and collection of answers in the policy making or any other context.
Member States' public administrations and other, non EU administrations	Administrations can also benefit from the IPM service either for answering surveys within the EU policy context or for other purposes. They can as well decide to deploy the OSS version in their services.

2.6.6 Related EU actions / policies

Action / Policy	Description of relation
CIRCABC	Communication and Information Resource Centre for Administrations, Businesses and Citizens, another ISA action.

2.6.7 ORGANISATIONAL APPROACH

2.6.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
ISA programme management	DIGIT B2 (Margarida ABECASIS)
European Institutions, Member State Administrations	ISA Management Committee, ISA Working Group
DIGIT A	Christos ELLINIDES, Jose MARIN, Laurent BUNIET, Benoît ORIGAS
DIGIT C	Marcel JORTAY

2.6.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
User Group Conference	Laurent BUNIET, Benoît ORIGAS, Margot FASSIAN	Once a year

2.6.7.3 Governance approach

The project is managed by DIGIT A and contracts external resources for service management, maintenance, community management and help-desk support. DIGIT A provides a Project Responsible and a Project Manager, both Officials in the unit.

A User Group community will be created around the IPM service and regular meeting will provide the opportunity to submit enhancements requests, exchange opinions and best practices.

The OSS community will have the possibility to actively contribute at the source code level via the Forge made available by ISA.

2.6.8 TECHNICAL APPROACH

IPM is delivered as an OSS project via OSOR.eu, the Forge made available by ISA.

The OSS community will have the possibility to actively contribute at the source code level.

2.6.9 COSTS AND MILESTONES

2.6.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	IPM Service	1458	ISA	Q3/2010	Q4/2015
Operational	Training	170	ISA	Q1/2011	Q4/2015
	Total	1628			

2.6.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Operational	133	116
2011	Operational	250	
2012	Operational	300	
2013	Operational	315	
2014	Operational	315	
2015	Operational	315	

2.6.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
IPM OSS project on OSOR.eu	http://forge.osor.eu/projects/ipm/	
What is IPM on Europa	http://ec.europa.eu/yourvoice/ipm/index_en.htm	

2.7 YOUR EUROPE – FACILITATING RE-USE OF CONTENT FROM NATIONAL PORTALS (*FUNDING CONCLUDED*)

2.7.1 Context

2.7.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common frameworks
Service in charge	DG-MARKT
Associated Services	

2.7.2 OBJECTIVES

The project's objectives are in accordance with Articles 1 and 3 of ISA Decision 922/2009/EC of 16 September 2009, namely to support cooperation between public administrations by facilitating their efficient and effective electronic cross-border interactions (Art.1) via the establishment of a common framework in support of cross-border interoperability (Art.3).

Through the ISA project, the Commission would like to establish a common framework for European information portals aimed at citizens (in the form of a semantic asset or by assessing the possibility of promoting the structure of European content on national portals) which would then go on to facilitate automated cross-border data exchange and updates between European public administrations and the Your Europe portal via content syndication.

Thus, as a result of this action, the Commission will automate cross-border information exchange and update between European public administrations and the Your Europe portal via content syndication. This will provide savings in resources both for the EU Commission and the public administrations, increased co-operation, more transparency and a multilingual service catalogue.

2.7.3 SCOPE

This action covers the activities between Your Europe portal and national information portals to develop share and re-use of a common framework for European Information portals. This common framework will be in a semantic asset form and will thus contribute to Semantic Interoperability, one of the priority areas in the ISA programme.

Activities that will increase the quality of the information received will also be within the scope of this action. This will ensure validity of the information provided to citizens and businesses when exercising their rights in another EU State.

This action has been devised in different phases starting with a preliminary feasibility study to implement the syndication incrementally. The first two phases of the implementation has been defined as follows:

- During the period 2011-2012, it is planned to conduct a pilot project to automate the syndication of content of two sections of the Your Europe portal with a limited number of Member States, based on the results of the feasibility study. The results of this phase are likely to be a proven reusable methodology for content syndication, a governance model and technical artefacts that could be reused by the European Commission.
- During the year 2013 and depending on the outcome of the aforementioned pilot project, the Commission intends to extend the syndication to the remaining sections of the Your Europe portal with content provided by the aforementioned Member States. After this second phase, the artefacts to syndicate content in the portal will be developed.

During the development of phase 2, the Commission's Your Europe team will define the strategy to syndicate the rest of the Member States within the portal. Therefore, further funds to finance this extension may be requested.

2.7.4 PROBLEM/OPPORTUNITY STATEMENT

The provision of national information for the Your Europe portal has been done so far through a non-automated process of ad-hoc requests being addressed to national authorities via the members of the Your Europe Editorial Board - originally set out by the PEGSCO committee members under the IDABC programme. This is, however, a time-consuming exercise for both national authorities and the European Commission. In addition, member states are increasingly pressing for the use of more cost-efficient methods of information provision and information sharing.

Due to the lack of common terminology and content structure between the different national portals and Your Europe, national authorities are obliged to feed two portals with information; their national portals and Your Europe at the same time. Not only does this put an extra burden on scarce public administrations' resources at national and EU level but also delivers a bad service to the EU citizens.

People who wish to find information online are confronted with a multitude of presentations of the information, different terminologies being used for the similar or identical concepts, etc. This obviously does not help reinforcing the feeling of an efficient European information service.

This action aims to make information exchange between these portals and Your Europe simpler and faster.

2.7.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
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Beneficiaries	Anticipated benefits
Member States' public administrations as direct beneficiaries	<p>This action will avoid having to update two different websites (national information portal and Your Europe).</p> <p>Beyond this, the Member States' public administrations benefit from a coordinated and structured way of providing information.</p> <p>Through content syndication, the resource intensity of content provision is kept at a minimum level.</p> <p>The time taken by citizens to find out the information they need in order to perform a task in another EU country is also reduced.</p> <p>Member States that have not yet set up their national information portals may re-use the life-cycle structure of the Your Europe portal as the basis for creating these.</p>
European citizens as indirect beneficiaries	<p>EU citizens will find, in a single central and user-friendly location, all their rights and obligations derived from EU law in relation to everyday situations of a cross-border nature. Thus, the Citizens section will contribute to better functioning of the single market.</p>
IT services industry as indirect beneficiary	<p>This action will bring closer together various communities, bodies and organisations working on semantic interoperability with the main aim of supporting public administrations in their coordination activities.</p>
European Commission services as indirect beneficiaries	<p>This action will remove the need to request annual information updates for the Your Europe portal from management authorities in the Member States.</p> <p>Available EU assistance services (YEA, SOLVIT, Europe Direct, Enterprise Europe Network, European Consumer Centres network, etc.) will be able to provide their services directly via Your Europe.</p>

2.7.6 Related EU actions / policies

Action / Policy	Description of relation
<p>Internal Market Single Market Act as adopted 27/10/2010 (COM 2010 (608) final</p>	<p>Making the internal market function better for citizens and businesses and providing them with practical redress when their rights are being denied in cross border situations. Action nr 49 from SMA:</p> <p><i>"Proposal No 49: In 2010, the Commission will continue to promote a one-stop shop to provide citizens and businesses with information and support concerning their rights in the single market, on the internet, by telephone or in person, by developing the 'Your Europe' internet portal and improving its coordination with 'Europe Direct'. The Commission will also strengthen its partnerships with the Member States with a view to ensuring that information on national rules and procedures is also available through this one-stop shop."</i></p>

2.7.7 ORGANISATIONAL APPROACH

2.7.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
European Commission	DG MARKT, Your Europe team' as the responsible for the action.
Member States' public administrations	Representatives of each Member State involved having both functional and technical skills.
Document Management Officer	The Document Management Officer is nominated by the DG and ensures a coherent implementation of the Decision 2002/47/CE, CECA, Euratom in the DG: represented in DG MARKT by Michele Hance-Jalhay.
Data Protection Coordinator	The Data Protection coordinator is nominated by the DG and ensures a coherent implementation of the Regulation 45/2001 in the DG, represented in MARKT by Hakan Ander.

2.7.7.2 Governance approach

The Governance approach is based on a Project Management Board that will:

- Champion the project, raising awareness at senior level;
- Guide and promote the successful execution of the project at a strategic level;
- Provide high level monitoring and control of the project;
- Adopt the project charter;
- Follow timely delivery and quality of new developments delivered by the system supplier;
- Set priorities, authorise plan deviations, scope changes with high project impact and decide on recommendations;
- Arbitrate on conflicts and negotiate solutions to important problems;
- Drive and manage change in the organisation;
- Ensure adherence to organisation policies and directions;
- Approve and sign-off all key management milestone artefacts (vision document, project plan, business case, etc).

DG MARKT will assign a total of two staff to ensure correct project implementation. Policy units responsible for single market rights in DG MARKT, DG ENTR, DG TAXUD, DG SANCO, DG EMPL, DH JUST, DG MOVE, DG HOME, DG EAC, will be regularly invited to contribute to the content development of the Your Europe portal as they are already involved in the project at its current stage.

The Member States' public administrations will also be closely involved in the different project phases through the existing Your Europe Editorial Board in order to discuss and agree on the proposals for common terminology and the choice of the most suitable content syndication tool.

2.7.8 TECHNICAL APPROACH

The objective is to ensure that ICT implications are taken into account in good time so as to allow timely, efficient and effective ICT support for implementation. Early consideration of the ICT implications increases the chances of optimal support for the study's implementation through ICT technologies. This way, it can ensure timely implementation (thereby cutting the administrative burden), avoid the creation of new e-barriers and support the functioning of the Internal Market.

The solution must be fully integrated into the workflow established for the Your Europe project. The workflow must include the processing of documents conveyed by EB members as well as those fed automatically from national sites. Since documents that are fed in automatically must follow the same process for translation, content processing must be directly integrated into the Word/XML and XML/Word conversion processes.

The exchange format used between national websites and the application will be RSS 2.0. Word documents will contain links to these RSS feeds and the links will be replaced with their content during the conversion to XML Document format. This solution provides for the encoding of fixed text in which a portion is dynamically fed in from an external site.

The proposed solution for syndication is a stand-alone application we have named 'XMLSYN' (XML Syndication). The application will be written in Java using an Oracle database to allow for potential hosting by the DIGIT Data Centre.

The application will have to adapt to three different scenarios: Scenarios (i) and (iii) will be straightforward. However scenario (iii) will require more complexity in terms of feed management. More than one feed will be required per page and the content of the feed will be parsed so that only useful content is extracted.

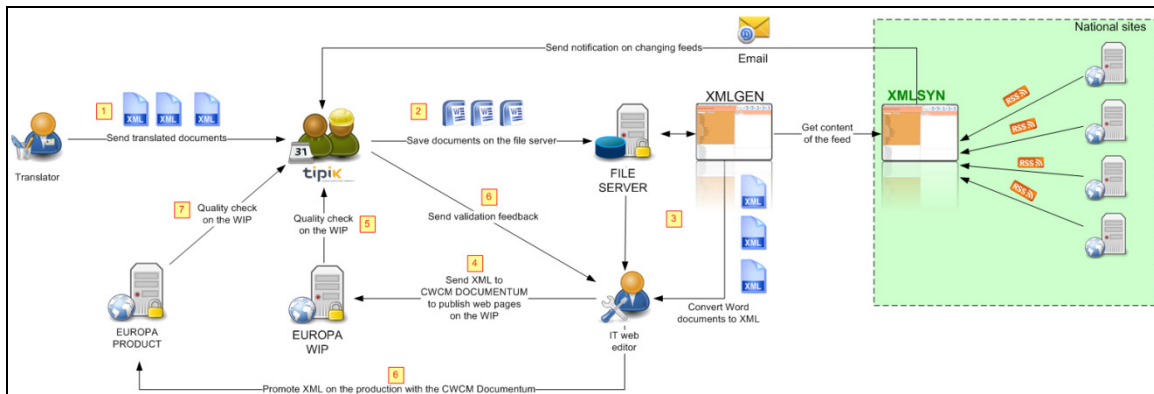
Features to be implemented:

- Data/RSS feed reception and storage: An application that retrieves daily RSS feeds and notifies key stakeholders of changes to content.
- Sharing of content via a Web service: This Web service is used by the third-party application to retrieve the contents of streams sent as parameters.
- Transmission to various stakeholders as well as to the IT and translation team: A plug-in integrated into the Word/XML conversion process is used to replace links to streams with their content. The filled Word documents are sent to stakeholders.

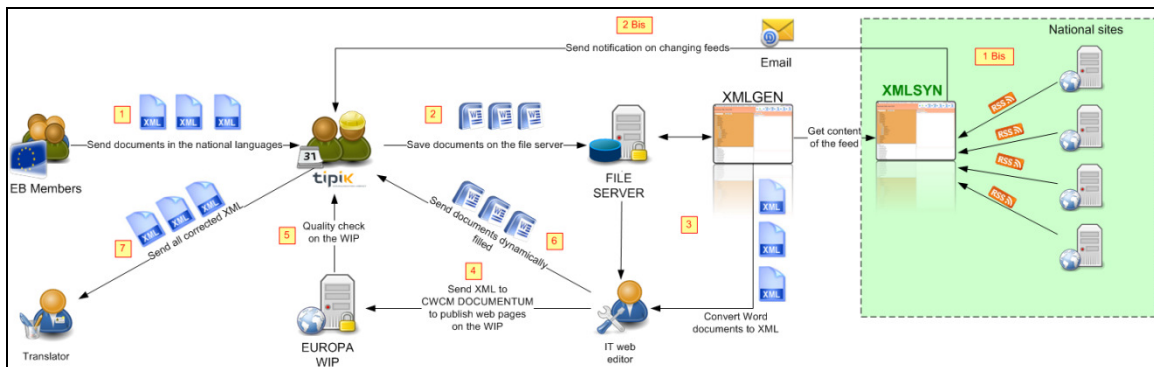
The application makes it possible to convert XML dynamically fed by RSS into Word documents for forwarding to editors. These documents will no longer contain dynamic links, but instead the final content will be reconstituted from RSS feeds.

These reconstituted Word documents may be used directly by translators in exactly the same way as documents supplied manually by the EB members.

Transmission to different stakeholders:



Transmission to the IT and translation team:



2.7.9 COSTS AND MILESTONES

Inception Phase

Execution of a feasibility study that encompassed the technical and functional requirements of content syndication and the possibilities for building on the knowledge gained from the EU-SPOCS project. These specifications provide solutions on how to link national web pages to the Your Europe website via RSS feeds. A practical case study is presented. These specifications also offer different solutions for organising the team in charge of checking consistency between pages.

Execution Phases

According to the feasibility study and the ensued project charter, the project should then be executed in two phases, as stated in the Scope of the action:

- Phase 1 consists in the execution of a Pilot Project to syndicate the content of two sections of Your Europe portal with a limited number of Member States;
- Phase 2 will focus in the remaining sections of Your Europe portal to syndicate the content with the aforementioned Member States.

2.7.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Feasibility study	200		Q1/2011	Q3/2011
Execution	Phase 1: Syndication of two sections of a limited number of Member States	500		Q4/2011	Q4/2012
	Total	700			

2.7.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Feasibility Study	200	200
2011	Execution Phase 1	500	0
2012			
2013			
2014			
2015			

2.8 MACHINE TRANSLATION SERVICE BY THE EUROPEAN COMMISSION

2.8.1 Context

2.8.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common Services
Service in charge	DGT
Associated Services	OP, DG MARKT

2.8.2 OBJECTIVES

The ultimate objective is to facilitate the efficient and effective electronic cross-border interaction between European public administrations. This will be achieved through development and operation of a common Machine Translation service offered by the European Commission which will be used by European and national public administrations and will be customised for their specific needs.

The MT@EC service will replace the European Commission Machine Translation Service (ECMT) which was in operation until December 2010. It will offer not only better quality of output, i.e. better translation, but also better quality of service, i.e. many more languages in the initial system, as well as the possibility to develop new language pairs and customised solutions to fit the specific needs of users in a flexible and cost-efficient way.

Examples of potential uses and users of the MT@EC include online services funded by Community funds through IDABC or ISA project, which require multilingual support and are already users of ECMT (as for example services like IMI, TED or OSOR.eu), networks of national experts and public administrations working on a specific field wishing to exchange information on their national context in their own language that can then be understood by the others, as well as exchanges between European and national administrations in the context of the monitoring the implementation of an EU directive etc.

MT@EC is also the expected response by the Commission (DG Translation - DGT) to the Multi-Annual European e-Justice Action Plan 2009-2013 (OJ C 75/1 of 31.3.2009), which states explicitly that the Commission (Translation Service) should ensure financing for "legal translation tools in all European language pairs" in the period 2009-2013. This was confirmed in the roadmap endorsed by the Council of Justice and Home Affairs held in Luxembourg on 3 and 4 June 2010, which refers to the development of "Automated legal translations". In this context the Commission presented the MT@EC proposal to the Council Working Party on Legal Data Processing (e-Law) at its 10-11 June 2010 meeting. It is worth noting as well the potential synergies with the pilot A project that is expected to be funded by the CIP programme according to the 2010 work

programme for the development of the e-Justice service aimed at developing basic components in the coming 2 to 3 years.

2.8.3 SCOPE

A common Machine Translation (MT) Service offered by the European Commission (MT@EC) would provide the means for fostering trusted information exchange between European and national public administrations, i.e. the first strategic consideration of EIS. This is because:

1. the language barrier would no longer limit the access to information and therefore hinder the increase of its use;
2. the efficiency of the usage of information is improved:
 - the person (or service) who accesses the information in their own language, will be able to understand very quickly whether it is relevant for their purpose and "route" it accordingly;
 - the sender of information will not have to translate the information they want to share/communicate in one or several common working languages. This will not only save the time and resources needed for a human translation in just one or several languages, but will also mean that the message/information is accessible in any of the languages offered by MT@EC at no additional cost and without time being wasted.
3. a service run by the Commission, as opposed to services freely available on the internet, will guarantee continuity and quality of service as well as respect of confidentiality and other legal aspects related to trust in information exchange.

2.8.4 PROBLEM/OPPORTUNITY STATEMENT

Information being exchanged across borders should be made available in the languages of all those concerned, i.e. both the sender/author and the recipient/user. It was for this purpose that the EC had made available the ECMT service to European and national public administrations.

However the ECMT service as it had been in operation until recently, was using outdated "rule-based" technology with upgrades being very difficult and resource greedy, and with very uncertain results in terms of quality.

In the last years there has been a shift in MT technology towards a data-driven approach (SMT - Statistical Machine Translation) which opens new opportunities.

The key difference between the "new" SMT technology and the "old" rule-based technology of ECMT is the fact that the former is data-driven. This means that, instead of requiring manual development of dictionaries, rules etc by humans, SMT uses existing language resources (monolingual corpora, parallel text corpora-dictionaries etc) and implements a more or less standard set of statistical algorithms to "train" a system that will then produce automatically the translation. The system is improved by "retraining" with translations of human quality, which can be post-edited machine translations, and with further language resources that are added.

In terms of resources this implies a huge difference between the current rule-based system and a future data-driven system:

- ECMT required huge investment in human resources specialised for the maintenance and improvement of each language pair, BUT very limited IT resources for its actual operation;
- a data-driven system (SMT) requires significant IT resources, especially for training and retraining it but also for running it with an acceptable speed, and huge and high quality language resources as underlying data, BUT minimum human intervention which can come from any user (not necessarily specialists) by proposing a post-edited version of the output of the MT system (see for example the "suggest a better translation?" invitation in Google translate and other similar systems).

That is why SMT has been widely taken up, not only by known innovators like Google (<http://translate.google.com/>) or newcomers on the MT market like Language Weaver (<http://www.languageweaver.com/>) or Asia Online (<http://www.asiaonline.net/>) but also by companies like Systran (<http://www.systran.fr/>) who combine SMT with their existing rule-based system to get what they call "hybrid" technology. It is worth noting that many of the successful services on the market (including Google, Asia Online and Systran) are based on "Moses" (<http://www.statmt.org/moses/>), an SMT "toolkit" developed under an EU funded project, Euromatrix (<http://www.euromatrix.net/>).

As part of the reflection within the Commission on a new strategy for Machine Translation an inter-service Task Force has been created in 2009. Acting on a mandate given by the Director General of DGT and the Commissioner responsible for Multilingualism, Mr Orban, the Task Force produced its report in April 2010. This recommended that the Commission should develop a new machine translation system which should:

- cover at least the same user needs as the ECMT service;
- allow for customisation to the needs of services offered and/or supported by the Commission (like TED, IMI, OSOR.eu, etc.), facilitating cross-border information exchange (for example procedures requiring exchanges between the Commission and Member States and other activities related to the implementation of EU policies), and;
- cover at least all EU languages.

It should also:

- guarantee the trusted exchange and use of confidential information and ensure the full protection for intellectual property rights of the source material that is translated and the language resources and technologies used;
- use efficiently the language resources available in all DGs (text corpora, translation memories, dictionaries, terminology databases, etc.) as well as the language applications and linguistic expertise available in DGT;
- be sustainable in financial and technical terms, and;
- ensure continuity of service.

The Task Force proposed to build the MT@EC around two pillars, or hubs: the "data management hub", i.e. the infrastructure for collecting, managing and processing the language resources underlying the MT system and the "MT engines hub", i.e. the infrastructure for receiving, managing and processing the MT request. The latter will consist of two basic components: the "engines", which includes all the MT engines for the different languages and the "dispatcher" which receives

the translation request, processes it, directs it to the appropriate MT engine, receives back the MT output and returns it to the requester in the appropriate form.

2.8.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Commission Services	<p>Main use: Asynchronous MT of working documents, letters, emails (like the ECMT)</p> <ul style="list-style-type: none"> - speed : the receiving Commission service understands quickly the information, without having to wait for a translation and "routes" it to the right person/department resulting to quicker response to the sender (national administration, citizen etc); - cost: human translators in the Commission only receive requests when the incoming document is important and relevant while they are asked to translate only the relevant pages.
Member States' public administrations	<p>Main use: Public administrations may use it for asynchronous MT of working documents, letters, emails (like the ECMT)</p> <ul style="list-style-type: none"> - speed : the receiving administration understands quickly the information coming from other public administrations, without having to wait for a translation and "routes" it to the right person/department resulting to quicker response to the interested parties (other national administration, citizens, EU bodies etc); - cost: human translation is requested by the sender only when the incoming document is important and relevant and only for the relevant pages.
European Commission services	<p>Online services offered or supported by the Commission</p> <p>Main use: Synchronous and asynchronous MT for online services offered to the citizens, Member States' administrations or enterprises either directly by the Commission or through commission funded projects (like the ISA projects).</p> <p>Benefits:</p> <ul style="list-style-type: none"> - speed : the user can access information in a language s/he understands without having to wait for the content provider or the online service provider to translate it. This could mean as well that services with a requirement for multilingual versions to be available before publishing it, could opt for translating the most frequently requested languages and still offer the possibility to access the information in all languages offered by MT, thus speeding up the information publication process; - cost: human translation is requested only for static or repetitive elements but dynamic content, free text etc is still accessible in more

Beneficiaries	Anticipated benefits
	languages through MT@EC.
Member States' public administrations	<p>Networks of member states representatives at EU level</p> <p>Main use: Spaces where information is exchanged between national representatives (for example circa interest groups, judicial collaboration etc) in the framework of EU wide collaboration activities</p> <p>Benefits:</p> <ul style="list-style-type: none"> - efficiency: national experts may participate in the work of expert groups based on their expertise and not on their knowledge of the working language(s) of the group and contribute without the language barrier (at least for written communication); - speed: the representatives in expert groups can circulate the information at the national level quickly and to the appropriate persons without having to translate the information; experts at the national level can respond in their own language and the national representative can share the reply without having to translate it to the working language of the group/network; - cost: human translation is used only when it is really needed and only for what is really relevant.

2.8.6 Related EU actions / policies

Action / Policy	Description of relation

2.8.7 ORGANISATIONAL APPROACH

2.8.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
DGT Translators	MT User Group.
Commission Policy Users	Through representatives of policy DGs in the Inter-service Task Force on Machine translation (MTF).

Stakeholders	Representatives
Public administrations	Through Policy DGs.
Users of other EU institutions	Interinstitutional Committee of Translation and Interpretation (ICTI) where the Commission is represented by DGT.

2.8.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
DGT user group	DGT translators	Ad hoc
Inter-service Task force on Machine Translation	Representatives of DGs	Ad hoc (continuous possibility of communication through wiki)
Council meetings on e-law and e-justice	Representatives of Member States	Twice to three times a year

2.8.7.3 Governance approach

The MT@EC project is managed in the context of the IT governance of DGT. The IT Steering Committee, chaired by the Director-General, has the overall responsibility, with its decisions being prepared, for matters related to machine translation, by the Language Applications Committee. The Project Steering Committee, involving the System Owner (Director of resources) and his delegate, the Business Manager (head of a translating unit), the System Supplier (IRM) and the Project manger (ISA action manager), runs the project.

The interests of the user DGs are represented through the Inter-service task force on machine translation, which has been reactivated to accompany the elaboration and construction phase. It is chaired by DGT and currently has representatives of SG, COMM, JRC, INFISO, MARKT, JUST, HR, DIGIT and OP, but is open to other DGs interested in contributing to this activity. The interests of public administrations of Member States are represented by the DGs that are responsible for supporting them, for example in the area of Judicial cooperation (e-Justice) through SG, OP and JUST or in the area of internal market information exchanges , through DG MARKT.

2.8.8 TECHNICAL APPROACH

An MT system based on a data-driven approach requires two main parts:

- on one hand language resources, i.e. the data (parallel multilingual text, text corpora, dictionaries etc) which are used by the SMT "engine", and;
- on the other hand sufficient IT resources and appropriate organisation for storing, and processing the data and operating the service.

Following up on the Task Force recommendations, DGT has established an MT action plan in June 2010, organised along the three main components of MT@EC (data, engines, service) which is currently being implemented. According to this plan, DGT shall target its investment to providing the first, more language oriented part, provide the necessary resources and infrastructure for the required underlying data/language resources.

The ISA programme, on the other hand, will be asked to contribute to the "IT and organisation" part, i.e. putting in place the appropriate IT infrastructure, and developing the IT and organisational environment for developing and operating the basic generic (so called "baseline") MT@EC service.

More specifically, the ISA action is (part of an MT@EC "programme"), expected to cover the following elements:

- the required infrastructure for training and running the system (which includes a "MT execution" part and the "dispatching" part);
- the engineering of the EC@MT baseline MT engines for the execution of the MT tasks;
- the engineering of the system for dispatching requests for MT and output;
- the helpdesk operations;
- the reception, technical analysis and implementation of requests for "custom engines" ;
- the contacts with national administrations.

Finally, the development of a customised solution to serve specific needs of one or the other MT users in terms of subjects, languages, interfaces, etc. using the MT@EC service should be organised as a separate mini-project, most probably funded by the requesting "client", which could be for example a service like IMI, TED, EurLex, etc. or a network of national administrations or other "eligible" bodies (eligibility criteria to be defined).

DGT will be responsible for launching and managing the ISA funded projects, for steering the MT action plan and the related projects and, later on, for the contacts with "clients", including the analysis of the linguistic part of requests for "custom engines".

DGT will also be responsible for the final overall MT@EC service and for ensuring its sustainability after the ISA funding for its development and initial operation is over.

The first part of the Inception phase will run between October 2010 and April 2011. Its objective is:

- to establish the scope and boundary conditions for the MT@EC, including operational concept, acceptance criteria, and descriptions of what is and is not intended to be part of the service;
- to discriminate the critical use cases of the system, that is, the primary scenarios of behaviour that will drive the system's functionality and will shape the major design trade-offs;
- to exhibit at least one candidate architecture against some of the primary scenarios (proof of concept);
- to identify the risks, i.e. the sources of unpredictability;
- to provide estimates for the elaboration phase that should follow immediately after the inception phase.

The second part of the Inception phase (corresponding to the elaboration phase of the MT@EC) will run from May/June 2011 for approximately one year and it will have the following objectives:

- review findings from the inception phase and adjust the design of the system architecture accordingly, identify components that need to be added, modified, or replaced, evaluate alternative options for the implementation of subcomponents, adjust developments to make most efficient use of IT resources;
- identify key users and elaborate on the user requirements from a functional point of view, and set up test and evaluation environments, involving the users;
- examine architectural options to ensure scalability, availability and fault tolerance of the system.

At the end of the Inception phase the following deliverables are expected:

- an executable architectural prototype implementation is in place, but with a limited set of supported language pairs;
- all major risks elements are clearly identified and an acceptance/avoidance/mitigation strategy is in place;
- a sufficiently complete list of user requirements in terms of language coverage, performance, translation quality, expected data volume, supported data formats, and security and confidentiality levels, to be able to provide estimates for work and time requirements for the development phase that should follow.

The Execution phase of the project (corresponding to the construction of the MT@EC service) will run from May/June 2012 for approximately one year and it will have the following objectives:

- develop the first production release of MT@EC service taking into account the conclusions from the inception phase, including the tests of the prototype developed in its second part;
- integrate the service and its components with some related Commission IT systems and processes;
- test the service with selected end users and third-party applications;
- deploy the first production release of MT@EC service.

At the end of the Execution phase the following deliverables are expected:

- MT@EC service "1.0" deployed;
- Technical specifications and procedures for third-party applications to connect to the service.

2.8.9 COSTS AND MILESTONES

2.8.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception Phase 1	Project Charter (initial version)	330	ISA	Q4/2010	Q2/2011
Inception phase 2	Project management: Project Charter (detailed version)	70	ISA	Q2/2011	Q2/2012
Inception phase 2	Architecture and analysis	55	ISA	Q2/2011	Q2/2012
Inception phase 2	Development	656	ISA	Q2/2011	Q2/2012
Inception phase 2	MT Engines "training"	150	ISA	Q2/2011	Q2/2012
Inception phase 2	Testing	69	ISA	Q2/2011	Q2/2012
Execution	Project management	90	ISA	Q3/2012	Q3/2013
Execution	Architecture and analysis	60	ISA	Q3/2012	Q3/2013
Execution	Development	750	ISA	Q3/2012	Q3/2013
Execution	Testing	100	ISA	Q3/2012	Q3/2013
	Total	2 330			

2.8.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Inception – First stage	330	272
2011	Inception – Second stage	1.000	

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2012	Execution	1.000	
2013			
2014			
2015			

2.8.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

2.9 DOCUMENT REPOSITORY SERVICES FOR EU POLICY SUPPORT

2.9.1 Context

The project aims at contributing to the objectives of the ISA Programme in terms of cross border collaboration and reuse in the document management domain with a strong focus on interoperability. It builds upon the conclusions of the feasibility study ran in the Inception phase of this ISA action in 2010-2011, which has analysed the opportunities to reuse generic document management services and components (Hermes and CIRCABC) by European, national, regional and local bodies (such as Luxembourg representation, Frontex, Croatia, ... who expressed interest on this action). This action is also aligned with the new Commission IT Rationalisation strategy, where document management is one of the main domains to start the process. Both projects, this action and the rationalisation exercise are complementary and will benefit one of each other.

2.9.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DIGIT.B.1
Associated Services	European, national, regional and local bodies, policy Directorate Generals (e.g. FP7 DGs, SFC2007 DG)

2.9.2 OBJECTIVES

The objective of this project is to provide generic document management solutions for EU policy support that can be used by Member States' public administrations, at national, regional and local level, European Institutions and bodies and other organisations. They could clearly benefit from leveraging the European Commission's central electronic document management system (HERMES) and open source multilingual document exchange platform (CIRCABC) to support common document management functionality and particularly in cross-border IT systems that support EU policies.

2.9.3 SCOPE

The European Commission has developed HERMES, a central system to support its electronic document management policy for all internal services and executive agencies. The system is in production, currently widely used by more than 40.000 users (European Commission, Executive Agencies and European External Action Service). Its usage is currently increasing significantly,

estimating that by the end of 2011, more than 5 million attachments will have been stored this year in HERMES, with an average size of 0,5 MB (=2,5 TB in total).

Another system with document management / storage functionalities is CIRCABC and provides internal and external interest groups with a private web workspace to collaborate on common objectives and tasks, enabling the effective and secure sharing of resources and documents.

Both systems are complementary in the sense that CIRCABC is a collaboration tool supporting the creation of electronic documents in the upstream of the document lifecycle, whereas HERMES provides the archiving documents until the end of its lifetime and in between, there is similar functionality between both platforms in terms of versioning, distribution and metadata.

The scope of this project is twofold. First, a business requirements study will analyse the business requirements of new clients (national and European public administrations) with document management needs in an EU policy context. This will be complemented with a feasibility study to analyse the re-usability of HERMES and/or CIRCABC components.

Second, a number of developments and services are foreseen to make available re-usable components and services of HERMES and/or CIRCABC based on the results of the requirements study.

2.9.4 PROBLEM/OPPORTUNITY STATEMENT

The Member States, the European Commission and other European Institutions create, exchange and store millions of business and legal documents each year. To some extent certain exchanges have been digitized, where in some cases there is full digitalization, where in others there is a hybrid combination with paper (scanning of paper inbound documents, or electronic storage of copies of outbound paper documents).

The national, regional, local and European public administrations frequently build different systems to automate the exchange and processing of official documents in the context of one or several EU policies (e.g. SFC2007, 7th framework programme for Research ...). The reality is that these exchanges are complex and never fully automated and manual intervention is often required to transfer documents from one system to another which leads to increased administrative burden and problems with version management amongst others. Today, many repositories with different implementation rules co-exist. A proper and well-designed document management system could contribute to the further harmonisation of document processing in EU policy making.

Two concrete potential clients with a need for integration with HERMES have already been identified:

- In the context of funding Framework Programmes for research in Europe (FP7 and CIP) the Participant Portal ("eFP7") has been built in order to optimise the interaction and transparency between the research community in the Member States and the European Commission. On this portal, users can manage and submit proposals, negotiate funding, manage their projects and submit periodic reports and file cost claims. These documents are formally registered and classified complying with the e-Domec policy. A technical integration between eFP7 and HERMES is expected to remove the costs and risks related to manual interventions for ensuring the coherence of the filing in HERMES and documents exchanged via the Participant Portal. The volume of exchanged documents in

the context of FP7 is estimated at 150.000 documents or 1 TB, for the duration of the programme.

- In a context of tax and customs, several administrative provisions foresee in the exchange of information. In a fiscal context a number of regulations and directives require an exchange of information between Member States for indirect tax and direct tax purposes. Traditionally the information exchange between different national administrations used to be paper-based and has been replaced by electronic means, such as email or electronic forms. Within the Commission - DG Taxud paper-based information flows and archives have been replaced by email and electronic archiving. Today, information exchanges are registered in Ares and stored in a central HERMES repository. In the context of mutual assistance between Member States, a similar Ares/HERMES system could be very useful in terms of traceability, security and transparency. However, it must be guaranteed that such a system guarantees all the legal provisions related to the mutual assistance. Such a system would be a good candidate for upgrading from email towards more value-adding document management systems.

The opportunities to reuse components and services of HERMES and CIRCABC as described further in 1.1.9 rely on the conclusions of the feasibility study conducted in the inception phase of this ISA action: first, the document management services portfolio for HERMES and CIRCABC was assessed against a reference framework to describe the offered and non-offered services. Second, the business needs for reuse were assessed via a survey and 20 interviews with organisations (European, national, regional, local) interested in potential reuse of the systems. This also resulted in high level scenarios for reuse of the systems. Third, a roadmap and business cases for the selected DM service consumers were detailed. Besides the two initial potential clients, eleven others have been identified: Luxembourg Permanent Representation to the EU, Luxembourg – Centre des Technologies de l'Information de l'Etat, Central State Administrative Office for e-Croatia, FRONTEX, Sweden - SALTO Information Resource Center, Malta Informational Technology Agency, European GNSS Supervisory Authority, European Police College, European Medicine Agency, European Food Safety Agency, European Aviation Safety Agency.

The HERMES project aims at providing the Commission with a document management system that supports EC decisions on document management and electronic archiving and their respective implementing rules. HERMES is about official documents. HERMES services cover the following functionalities: storage, registration, filing, workflow (assignments and e-signatories), metadata, versioning and distribution for internal European Commission people. HERMES must be placed in the Electronic archiving and Document Management framework of the European Commission (e-Domec), along with HERMES Repository Services (HRS), Ares and NomCom. HRS are web services that allow local applications in DGs to connect to the HERMES common repository of documents and files.

CIRCABC provides versioning, metadata and distribution functionalities. CIRCABC distributes and manages electronic documents and files in any format, many languages and with version control. The documents are stored in the CIRCABC Library. In the Library, the documents can be searched, viewed, uploaded and downloaded, modified, versioned etc. They can be grouped with their translations into multilingual editions. The documents are described precisely by adding

document dynamic properties and defining keywords in all the EU languages, which allows executing multilingual document searches.

HERMES and CIRCABC are complementary in terms of services and functionality.

Both HERMES and CIRCABC have been identified as re-usable components by the EIIIS Study on potential reuse of service modules and components. Hence, this project is well-placed as a concrete follow-on of this study.

This project fits very well in the objectives of the ISA programme, as it aims at providing common services for document management and archiving as well as interoperability architecture building blocks.

Finally, large investments have already been dedicated to making the HERMES infrastructure scalable, reliable and highly-available. This project is an excellent opportunity to leverage from these investments and to expand the scope of its use.

2.9.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations (national, regional and local), European institutions and bodies and other organisations	Streamlining document exchange and archiving processes Economies of scale (infrastructure) Cost savings (development) Compliance (common document management standards) More transparent document management procedures in European policy execution Finding and sharing information more easily

2.9.6 Related EU actions / policies

Action / Policy	Description of relation
1.3 Catalogue of services	Publication of Hermes services in the Catalogue of services

2.9.7 ORGANISATIONAL APPROACH

2.9.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	ISA Coordination Group
System supplier System owner Hermes	Project Coordination Group
Current and potential clients of Hermes and CIRCABC	Stakeholder Coordination Group

2.9.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Meeting	ISA Coordination Group	Every 2 months
Meeting	Project Coordination Group	Every month
Meeting/conference	Stakeholder Coordination Group	Organised whenever necessary

2.9.7.3 Governance approach

The approach and governance of the project is structured around 3 groups: the ISA Coordination Group, the Project Coordination Group and the Stakeholder Coordination Group.

The mission of these groups will be to ensure the successful governance of efforts in relation to the internal and external stakeholders. These groups will not be formal committees but a set of mechanisms using the existing communication channels, workshops and meetings. The basic

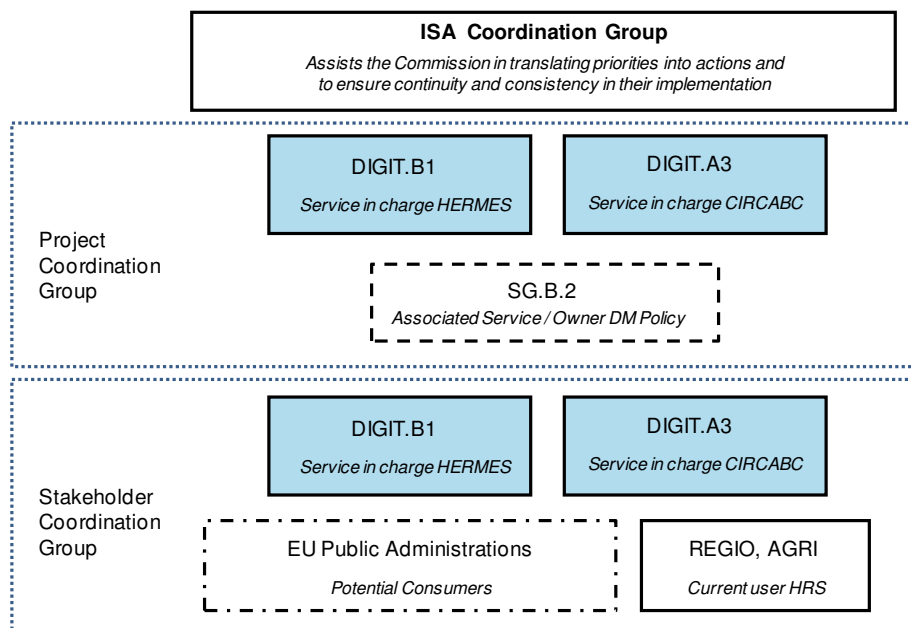
principle is that these groups should be versatile and empowering, with minimal overhead bureaucracy. Of course, when and if required, these groups may be further formalised into committees.

- **The ISA Coordination Group**
The ISA Coordination Group will meet each two months to ensure coordination and involvement of services in the project coordination group and ISA.
- **The Project Coordination Group**
The Project Coordination Group will be used to bridge the perspectives among the internal stakeholders. The Project Coordination Group will meet monthly to ensure coordination of the associated services, DIGIT.B1, DIGIT.A3 and SG.B2.
Regular project review meetings (review of project progress), alternating with team meetings twice every two weeks (review of the individual tasks) will be held inside each of the involved entities (DIGIT.B1, DIGIT.A3) to ensure timely delivery of the project.
- **The Stakeholder Coordination Group**
The Stakeholder Coordination Group will be used to consult the stakeholders, when additional information and clarification is required.

Based on the actual needs and to better bridge the technical and the business aspects, a Stakeholder Coordination Group could be set up to involve the “business” stakeholders of the current and potential users of HERMES and CIRCABC.

Meetings of the Stakeholder Co-ordination Group will take place on exceptional basis: only when additional information and clarification is required.

The governance structure is summarised in the diagram below:



The following methodologies will be used on the project: PM² will be used at the project management level, RUP@EC will be used for software development and ITIL for service management.

ISA Coordination Group

The ISA coordination group assists the Commission in translating priorities into actions and ensures continuity and consistency in their implementation.

DIGIT – Directorate General of Informatics of the European Commission

Unit DIGIT.B.1

This unit is in charge of the HRS project and will ensure the development of specific HRS- related modules.

Unit DIGIT.A.3

This unit is in charge of the CIRCABC project and will ensure the development of specific CIRCABC-related modules.

Secretariat general

Unit SG.B.2

This unit is process owner of document management within the Commission.

Group of public administrations, agencies, DGs and permanent representations to EU

Public Administrations: Luxembourg, Croatia, SALTO;

Agencies: EMA, EFSA, GSA, CEPOL;

DGs: COMP, TRADE;

Representations: Luxembourg.

2.9.8 TECHNICAL APPROACH

The approach of the project is based on three phases. The first phase will be covered by the inception phase, the second phase will an execution phase.

1. Inception phase - Business requirements analysis and feasibility study

- The business requirements gathering and management methodology will be based on RUP@EC and will result in a requirements catalogue, which consolidates the different stakeholder requests into needs and related system features.

Through interviews and desk research, stakeholder requests will be gathered and analysed to define the business requirements of potential policy support systems that could benefit from re-using HERMES and/or CIRCABC as an electronic document management system. Additionally, the digitization of manual procedures between national and EU administrations in the policy context should also be looked at. Potential new clients of common storage and archiving services are information systems supporting EU policy making processes with Member States as stakeholders, such as the SFC2007 project or eFP7, which are platforms between national and EU

public administrations. Also DG Taxud has expressed a need for storage and archiving capabilities in the context of mutual assistance between Member States' administrations. The envisaged common document management services should also enable the facilitation of other interoperable cross-sector services, such as the "Trusted Document Exchange Platform". The business requirements analysis will also study existing pan-European policy systems and look whether they can re-use HERMES/CIRCABC to replace local repositories. Where possible, existing research (e.g. EIS study) and standardization initiatives (Moreq2) will be consulted.

The business requirements approach will include requirements from an organisational, economic, technical and legal point of view.

- Starting from the business requirements catalogue, a feasibility study will assess whether the existing components of HERMES and/or CIRCABC can fulfil the identified requirements.

On the one hand, the feasibility study will be an in-depth analysis of the potential reusability of European Commission's current HERMES and CIRCABC solutions and assessment whether the current services and components can respond to the identified business requirements of the new stakeholders.

On the other hand, it will look for synergies between HERMES and CIRCABC and the feasibility of merging common components into single and shared components, such as archiving, authentication or encryption.

This study will look into the following areas: storage, capture/scanning, filing, retrieval, versioning, publishing, classification, standardisation, metadata, security, availability, retention period (short-, medium- and long-term), archiving, distribution, workflow, creation/authoring, authenticity and traceability, destruction and scalability of the current systems.

For both HERMES and CIRCABC the study will identify which areas they cover today and which they might need to cover in the future.

Finally, this phase will also investigate the feasibility of an open-source version to be shared with Member States with local requirements.

2. Execution phase - Development and assistance for implementation

In a first development phase, quick-wins will be realized by making available the re-usable components and web-services that currently exist in HERMES and CIRCABC. The web-services currently existing in HERMES are referred to as HRS (HERMES Repository Services).

In a second phase, HERMES/CIRCABC will be re-engineered in order to re-use the best components of each. An open-source version will be made available to Member States.

During the execution phase, assistance for implementation of the re-usable HERMES/CIRCABC components will be offered to new clients that want to replace their local repositories.

3. Operational phase – Operations, support and assistance for pilot clients (Hermes and/or CIRCABC)

Phases of the ISA action	
Inception phase	ISA Feasibility Study: <ul style="list-style-type: none"> ○ D1.1 Description of the Document Management portfolio for HERMES and CIRCABC ○ D2.1 Scenarios for reuse of document management services by potential service consumers ○ D3.1 Roadmap and business cases for the selected DM service consumers
	Project charter for execution phase 1
Execution phase	Execution phase stage 1: Extended reuse of HERMES and CIRCABC <ul style="list-style-type: none"> ○ WP1: Integration between HERMES and CIRCABC services ○ WP2: Secure access to HRS over the internet ○ WP3: HERMES Domains
	Execution phase stage 2: Customisable HRS web services
	Execution phase stage 3: HAN Light
Operational phase	Operations, support and assistance for pilots.

2.9.9 COSTS AND MILESTONES

2.9.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	ISA Feasibility Study Project Charter	350	ISA	Q32010	Q32011
Execution	Stage 1: Extended reuse of HERMES and CIRCABC, WP1, Functional specifications, Design specifications, Development	100	ISA	Q32011	Q32012
Execution	Stage 1: Extended reuse of HERMES and CIRCABC, WP2, Functional specifications, Design	240	ISA	Q4 2011	Q42012

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	specifications, Development				
Execution	Stage 1: Extended reuse of HERMES and CIRCABC, WP3, Functional specifications, Design specifications, Development	450	ISA	Q42011	Q42013
Execution	Stage 1: Extended reuse of HERMES and CIRCABC, WP1, WP2; WP3 Execution report	10	ISA	Q42013	Q42013
Execution	Stage 2: Customisable HRS web services Stage 3: HAN Light Functional specifications, Design specifications, Development, Execution report	500	ISA	TBD	TBD
Operational	Stage1: Extended reuse of HERMES and CIRCABC assistance of pilot clients Hermes and CIRCABC	50	ISA	Q32012	Q42013
Operational	Stage 2: Customisable HRS web services Stage 3: HAN Light assistance of pilot clients Hermes and CIRCABC	100	ISA	TBD	TBD
	Total	1800			

2.9.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Inception	350	350
2011	Execution	450	
2012	Execution	350	
2013	Execution	500	
2013	Operational	150	
2014			
2015			

2.9.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

2.10 MULTISECTORIAL CRISIS AND BUSINESS CONTINUITY SERVICES (FUNDING CONCLUDED)

2.10.1 CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG DIGIT
Associated Services	SG.B.3, DG ECHO

2.10.2 OBJECTIVES

The objective of this project is to provide re-usable components and standard services supporting some needs in the area of crisis management and business continuity

More specifically this action aims at:

- Providing re-usable components to European Institutions and Member States covering Crisis Management and Civil Protection activities;
- Provide services for specific needs (messaging, tracking ...);
- Providing a generic systems to European Institutions and Member States covering some standard Business Continuity functionalities;
- Putting in place some information exchange capabilities between some Business Continuity or Crisis Management systems.

This action covers the identification of needs, the study of the know-how, best practices and existing systems at European Institutions and Member States national administrations, the adjustment of components eligible for reuse, the analysis and development of some new components and the put in place of some information flows between systems.

This action will covers evaluate the identification of needs for the services linked to this generic system. , the study of the know-how, best practices and existing systems at European Institutions and Member States national administrations, the adjustment of components eligible for reuse, the analysis and development of some new components and the put in place of some information flows between systems.

The action will also cover the support for the deployment of the tools and components in the Member States and will give assistance on the configuration and adaptation to the new versions where needed.

2.10.3 SCOPE

This action is related to the following priority areas of the ISA programme:

- Interoperability Architecture – Building blocks
- Trust and Privacy

The scope of this action is twofold:

- Providing reusable software components in the area of Business Continuity;
- Providing reusable software components and information exchange flows in the area of Crisis Management and Civil Protection.

Reusable software components in the area of Business Continuity

This action includes the development of a generic system (an open source version), based on Noah components, which will increase the cooperation and the information sharing in the business continuity domain. Noah is generic by design, which means that it is easy to be used in other contexts than the European Commission. This system will offer the means for effective communication, increasing interoperability between the existing systems of EC and Member States and by facilitating the creation of new standard systems easy to set-up.

This new system will cover the main functionalities needed for the business continuity management, principally for preparedness and response phases but also some aspects for prevention and recovery, such us:

- Forum & document repository;
- Instructions/checklists templates, implementation and follow-up;
- Potential impact description;
- Different communication means (WebPages, portals, emails, sms, pda, ...);

- Communication tracking;
- Logbook.

The system could use a wide range of means of communication such as web pages, emails, sms and RSS feeds. It could also be made available on alternative devices such as tablet pc or pda.

Reusable software components in the area of Crisis Management and Civil Protection

The scope of this action also includes the identification of existing systems and/or components used at other institutions and Member States in the area of Crisis Management. Argus, the communication tool used at the Commission for crisis management, will also be part of the study.

Based on the collected information, components eligible for re-use and missing components will be identified. After implementation they will be made available to institutions and members states national administrations.

Within the interoperability context the possible evolution or concretisation of existing standards, such as OASIS CAP, EDXL will be examined.

2.10.4 PROBLEM/OPPORTUNITY STATEMENT

In the domain of business continuity and crisis management the following relevant issues are faced:

- Non-usage of common procedure, standards and tools among the key players from EC and Member States;
- No information on cross-sector and cross-border interoperability between the existing systems;
- Lack of information on existing reusable and reliable multichannel messaging and message tracking solution to be used in case of a BC event or crisis.

In the last years a significant effort was made at EC to develop some communication tools for Business Continuity and crisis management and these tools showed technical excellence and eligibility for reuse. Sharing these solutions with Member States and potentially reusing their proven solutions is in line with the objectives of the ISA programme. Business and crisis process have a lot of standard or generic elements, which could have been implemented with some generic components.

The European Commission's internal ARGUS system facilitates internal coordination and timely communication throughout the duration of crises occurring within and outside the EU. ARGUS also allows the European Commission to make an effective contribution as part of the EU Crisis Coordination Arrangements (CCA), exchanging information with the Council and Member States.

Interest in the usage of both Crisis and BC management systems has already been shown by different agencies and institutions.

2.10.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Commission services and Member States' public administrations	<ul style="list-style-type: none"> - Free to use open source tools for implementing crisis and business continuity processes, for which maintenance and further development are guaranteed; o Better integration of crisis and business continuity IT Systems; o Better messaging and better tracking of messages; o Solid, scalable and extensible interoperability platform; o Increased level of cooperation between stakeholders from EC and Member States; o Shared experience and support for setting up the crisis and business continuity management tool.

2.10.6 ORGANISATIONAL AND TECHNICAL APPROACH

A Project Steering Committee will be established to provide overall guidance and direction for the project, which will have members from all concerned stakeholders. A working group will also be established with the member states.

The first phase of the action will cover the inception and will have as output a feasibility study and the project charter.

The feasibility study will define how the existing IT systems used in business continuity and crisis management at EC and in Member States could benefit of the reusability and information exchange capabilities. This could also support the implementation of standards in crisis and business continuity management (e.g. OASIS CAP).

The study will also identify the best reusable solutions for common technical issues, particularly related to messaging, message tracking and interoperability, if needed, propose new or combined solutions to support the crisis and business continuity processes.

The feasibility study may identify a need for services (and not only components) from a common infrastructure supporting specified needs in the domain of crisis and business continuity management.

The feasibility study will also identify potential clients for these solutions based on existing systems in production or still in a project phase.

The project charter will detail the different phases needed to cover the identified needs.

The project teams will work using the RUP@EC methodology for software development and ITIL for service management.

The key point of the chosen approach consists in:

- the study of some existing information systems at the European Institutions and in Member States administration to identify valuable know how, reusable components, components to be developed and possible data exchange flows;

- the adoption of an incremental development process which progressively makes available the support of more complex interaction;
- the re-use of best practices and existing implementation as well as the reference to existing standards that have been already developed.

2.10.7 COSTS AND MILESTONES

2.10.7.1 Breakdown of anticipated costs and related milestones

Phase:	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Feasibility study & project charter	300	ISA	Q2/2010	Q1/2011
Inception	Extend Feasibility study with PoC's of identified building blocks	100	ISA	Q2/2011	Q1/2012
	Total	400			

2.10.7.2 Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	300	300
2011	100	
2012		
2013		
2014		
2015		

2.10.7.3 ANNEX AND REFERENCES

Description	Reference link
Commission Staff Working Document - Framework for Business Continuity Management in the Commission	SEC(2006)898
Commission Decision on Provisions for Setting-up the ARGUS General Rapid Alert System	C(2005)5306
ARGUS Vision Document	<<no ref >>

Description	Reference link
Community Capacity in Crisis Management (C3M) Interservice Group - Inventory of crisis management capacities in the European Commission and community agencies	http://critechportal1.jrc.it/c3m/tabid/90/Default.aspx?ItemID=426&ModID=534
OASIS CAP	http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=emergency

2.11 PROMOTING CONSISTENT EU E-PROCUREMENT MONITORING AND PERFORMANCE

2.11.1 Context

2.11.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common framework
Service in charge	DG MARKT
Associated Services	DIGIT.B4, INFSO, ENTR.D4

2.11.2 OBJECTIVES

The project will make available to MS a coherent set of information products supporting e-procurement and EU-wide cross-border accessibility to such operations through the following tasks:

- Selecting a sample real-life e-procurement operations for detailed analysis against principles, policy priorities and requirements set out within the current procurement policy revision and the EIF;
- Use of best practices to define reference implementation models, covering all EIF layers;
- Definition and testing of indicators and a method for monitoring e-procurement use and performance consistently across the EU;
- Performing a gap analysis of market products against these models and identifying any missing building blocks; launching relevant standardisation activities;
- Development of user guidance for setting up e-procurement operations.

2.11.3 SCOPE

The main project goal is to increase use of e-procurement and to support cross-border participation in e-procurement . A key impediment to this policy goal is the proliferation of a range of different national/regional e-procurement approaches, which through their very diversity (in terms of access and the demands they place on suppliers) are hindering wider accessibility across borders and for SMEs. The envisaged work fits within the logic and rationale of the EIS.

Technology itself poses no technical barriers to building pan-European EIF-compliant e-procurement services, but uncoordinated deployments continue to prevent cross-border procurement. The information tools that will be produced aim to:

- identify common barriers to participation in cross border e-procurement;
- develop common tools and approaches to overcome these obstacles;
- develop and share with the MS greater capacity to monitor e-procurement developments.

2.11.4 PROBLEM/OPPORTUNITY STATEMENT

E-procurement involves handling the government purchasing process phases using electronic communication and processing, thereby achieving efficiency and cross-border participation while fulfilling legal and procedural requirements. The vision driving the EU policy has been that any economic operator can, through a PC with an Internet connection, compete for government contracts published anywhere in the EU. This is a powerful vision, but experience to date shows that its actual delivery is very challenging for a range of technical, resource, and change-management reasons. There is a need for a continued strong EU dimension to support the generalised deployment of e-procurement given the expected benefits, to prevent that the use of functionally different e-procurement systems across the EU create new barriers to cross-border procurement.

2.11.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations	EU public offices will receive information support tools in designing fully EIF-compliant e-procurement operations, enabling cross-border access and interoperability. This will increase the general uptake of e-procurement and level of SME inclusion.
Procurement authorities	National procurement authorities will acquire greater capability to monitor e-procurement developments in their domestic markets, setting out the conceptual foundation for drawing up their own policy and plans.
Software industry and IT service markets	By providing a coherent model for implementing e-procurement operations within the broader EU Interoperability framework, we will offer to industry and services market a much clearer reference scenario to define their own strategies.
European Commission Services	The project deliverables will complement and reinforce the actions that other EC services are carrying out in other dimensions of the e-Procurement domain (R&D, policy support action, internal

Beneficiaries	Anticipated benefits
	procurement).

2.11.6 Related EU actions / policies

Action / Policy	Description of relation
ePrior (ISA WP 1.7)	The project will result in a coherent set of requirements to be met by the Commission when implementing its pre-awarding e-procurement operation.
Peppol sustainability (ISA WP 1.6)	The project will seek to integrate Peppol pre-awarding components into an overall process model, thereby providing system designers and planners with the ability to cover the full e-procurement process using standardised components.
Modernisation of procurement directives (ongoing)	The project will flank the legislative action with coordinated measures to facilitate wide adoption of the revised framework.
2010-2013 ICT standardisation work programme	The project will result in a blueprint for widely-accessible e-procurement solutions that is going to facilitate the identification of gaps to be filled by standards makers.
Various ICT R&D actions	The above-mentioned blueprint will serve as a reference framework to draw up work plans for developments that are really relevant.

2.11.7 ORGANISATIONAL APPROACH

2.11.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
e-procurement authorities in the MSs	Senior MS procurement agency representatives within the ACPC and its technical arm for e-procurement, the epWG.
e-procurement operation managers	These will be represented in the Expert Group for e-procurement being set up by DG MARKT.
Software industry	The Expert Group for e-procurement will also be composed of representative from software industry.
ICT services	The Expert Group for e-procurement will also be composed of

Stakeholders	Representatives
providers	representative from EU ICT Services providers.

2.11.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
ACPC meetings	Senior MS procurement agency representatives.	4 per year
epWG meetings	Senior MS procurement agency representatives specialising in e-procurement.	4 per year
Press statements and other Commission communications	Procurement community at large; policy makers.	Expert group and study updates as appropriate

2.11.7.3 Governance approach

The project is being run by DG Markt C.4 via the following decision levels:

1) Overall action planning - The Commission has carried out a consultation within the EU procurement community on expanding the use of e-procurement. A detailed summary of the responses to the Green Paper has been published under:

http://ec.europa.eu/internal_market/publicprocurement/eprocurement/consultations/index_en.htm.

The analysis of the 77 responses received to the Green Paper provides key input to inform all the work within this project. There is broad support for EU level action, including the use of legislation, to facilitate the use of standardised e-procurement solutions - a small majority of respondents even support the imposition of EU level requirements to use e-procurement. Drawing on this information, the Commission plans to implement a range of non legislative actions, seeking to encourage participation and achieve consensus amongst the stakeholders.

2) Policy level - All the decisions made in the project will be reviewed and agreed upon within the policy makers in the procurement domain within the ACPC and epWG, consulted at regular intervals. Representatives in particular will be asked to mobilise national stakeholders to help Com identify and share goals and approach.

3) Market/business level – The Commission is setting up an informal expert group on e-tendering is being set up by DG MARKT (deadline for submission of the applications: 30/9/2011). The

Group, bringing together leading experts in the design and implementation of e-procurement systems and business strategies, will develop by the end of 2012 a blue-print for common solutions for electronic submission of offers. The Group will be used by the Commission to draw up and test with business players the main decisions to be made in this project.

4) Action level - Technical tasks will be entrusted to selected contractor(s) under the day-to-day management of DG MARKT C.4 team.

2.11.8 TECHNICAL APPROACH

The following projects are planned:

Definition of an EIF-based model for design and set up of pre-award e-procurement operations

This activity (originally planned for ISA funding) will be carried out by the e-tendering expert group, to be funded under DG MARKT budget. The group will be ready to start work in early November and will run for one year (8 meetings are scheduled) with a planned optional extension for an additional year. The group will bring together professionals with a proven record of experience in the various areas of e-procurement who, under the chairmanship of the Commission, will study and come up with a blueprint of ideal models for tender submission which, taking account of the different business context and approaches across the EU, enable seamless, borderless participation as well as SME inclusion. By referring to these models, procurement actors will be able to build up e-tendering solutions which, although independently designed, converge towards a homogeneous set of interfaces enabling wide SME and cross-border accessibility. The group will address key issues such as e-Signature, e-catalogues, e-procurement tools, etc., with the aim to define ways to ensure a common (or interoperable) approach across the EU. As part of the task, the group will perform a standardisation gap analysis, to see which standards would be necessary or desirable, and come up with specific business requirements for future standardisation work. Key to success of the initiative will be the ability to keep the group lean and flexible (20 people max), while ensuring that group membership encompasses all e-procurement dimensions (demand and offer side of the business, IT architectures, economics, administration, etc.) and a balanced representation of the stakeholders (businesses, contracting authorities, geographic areas, etc.).

To draw up the blueprint, the Expert Group will draw on the practical results of a study on accessibility and functionality of e-procurement platforms that has been launched in July 2011 (notice 2011/S 142-235043 of 27/07/2011, lot 2. Deadline for submission: 30 sept 2011.) The study, funded by DG Markt, will involve detailed analysis and comparison of the design and experience of the 20-30 most active/successful e-procurement platforms in Europe, with a view to identifying problem areas and successful approaches to addressing them. The focus of the project is to ensure that best practices, but also errors to be avoided, are identified and can be reapplied.

Monitoring e-Procurement

This is the core part of the ISA action. A Tender notice (2011/S 142-235043 of 27/07/2011, lot 1) has been published (deadline for submission: 30 sept 2011) covering the study phase 1 of the 2011 ISA workplan. With this project the Commission aims to collect updated information on the

current state of development of e-procurement and define a strategy and the means to make the collection of this information increasingly automatic. One of the necessary conditions for EU and national policy-makers to be able to accompany and steer the take-up of e-procurement is the capacity to track developments and measure the impact of change. This capacity is currently very limited, although e-procurement platforms embed by design business data monitoring functionality. Therefore the contractor is asked to map the e-procurement landscape across the Member States, collect business data (amount of transactions performed electronically, evolution of profiles of participants / winners, cost benefits, etc.) and inform the Commission on an ideal set of e-Procurement indicators that could be derived from e-procurement platforms. One of the key features that will be measured is the ability of e-procurement operations to attract more SME than the traditional procedures and to increase the SME chances win contracts.

Trialling the e-procurement performance indicators

Once the study on the performance indicators is completed, its results will be tested in a trial exercise involving the EU procurement operations and the Member State that will agree to participate. This project implements the activity defined as phase 2 under the ISA 2011 workplan. The project will be carried out as part of the overall monitoring project and has already been launched with notice 2011/S 142-235043 of 27/07/2011, lot 1. Contractually, work is handled as an optional task, that may be ordered 2 consecutive times via contractual extensions, aimed at trialling the indicators in practice with the help of Member States / procurement agencies that will agree to participate. The Commission has the discretion to launch such work conditional upon viability of the finding of the study (as well as availability of ISA funding for financial commitment in 2012 and 2013). The contractor will support the Commission and its partners concerned in the MSs in establishing a first experimental process for e-procurement performance measurement providing the following support activities:

- overall management (planning, monitoring and reporting covering each single operation involved);
- information dissemination (supporting the Commission in the communications with its partners in the MS in preparation for the trial; preparation of detailed guidelines and information material on how to carry out the trial);
- on-field technical/managerial support to the organisations involved in the trial.

Implementing actions

In late 2013, the combined results of the expert group and the contractor activities will provide clear directions for further implementation actions. Current DG MARKT plans involve the development of support tools for e-procurement designers/planners and policy makers. Deliverables involve a detailed study on a comprehensive standardisation mandate (a new generation of accessibility standards for pre-awarding operations are envisaged), business/operational and technical guidelines for setting up e-procurement operations, operational support for the COM and the MS to implement the operational performance measurement process.

2.11.9 COSTS AND MILESTONES

2.11.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Study - Phase 1 (monitoring)	Review and mapping of EU e-procurement infrastructure identification of feasible indicators.	300	ISA	Q3/2011	Q1/2013
Study - Phase 2.1 (monitoring)	Trial of e-procurement monitoring system.	200	ISA	Q3/2012	Q3/2013
Study - Phase 2.2 (monitoring)	Trial of e-procurement monitoring system.	200	ISA	Q3/2013	Q3/2014
Study Phase 3 (pre-award)	Definition of an EIF-based model for design and set up of pre-award e-procurement operations.	150	DG MARKT	Q3/2011	Q3/2013
Study - Phase 4 (pre-award)	Implementation actions.	150	ISA	Q1/2014	Q3/2015
	Total	1.000			

2.11.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010			
2011	Study - Phase 1 (monitoring)	300	300
2012	Study - Phase 2.1 (monitoring)	200	
2013	Study - Phase 2.2 (monitoring)	200	

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2014	Study - Phase 4 (pre-award)	80	
2015	Study - Phase 4 (pre-award)	70	

2.11.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
Summary of the Green Paper responses:	http://ec.europa.eu/internal_market/publicprocurement/epr/ocurement/consultations/index_en.htm	
Expert Group: Terms of Reference and call for applications:	http://ec.europa.eu/internal_market/publicprocurement/epr/ocurement/expert/index_en.htm	
Terms of Reference for the e-procurement monitoring and benchmarking study (notice 2011/S 142-235043 of 27/07/2011):	http://ec.europa.eu/dgs/internal_market/calls_en.htm	

2.12 EHEALTH EUROPEAN INTEROPERABILITY FRAMEWORK

2.12.1 Context

2.12.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	INFSO H1
Associated Services	DG MARKT.C4 - DG ENTR.D4

2.12.2 OBJECTIVES

This action directly relates to action 2.12 of the ISA work program which is to establish an interoperability framework for European Cross border eHealth projects on the basis and under the umbrella of the EIF. The overall objective of this eHealth European Interoperability Framework is to define, agree on and share a common set of standards (including semantic standards), technical specifications, profiles, guidelines, testing tools and procedures, quality management system, certification scheme, roles, responsibilities and processes that would be used by all stakeholders involved in the design, development, deployment, operations and maintenance of eHealth Systems in Europe.

Before agreeing on which standards and specifications should be part of the eHealth EIF, those standards, developed by leading fora and consortia, need first to be recognised. Action 2.2 of the ISA work program provides guidance on a common assessment method for standards and specifications (CAMSS), which we propose to directly apply for this action.

2.12.3 SCOPE

The proposal is in line with the sectoral based approach of the EIS. The action belongs to the "Interoperability Architecture" cluster, and should help elaborating a joint vision on interoperability architecture of eHealth and providing guidance on architecture domains where Member States share a common interest. The eHealth European Interoperability Framework will be developed under the umbrella of the European Interoperability Framework, and might also enrich and induce changes in the EIF.

2.12.4 PROBLEM/OPPORTUNITY STATEMENT

A specific action of the Digital Agenda is to "Foster EU-wide standards, interoperability testing and certification of eHealth systems by 2015 through stakeholder dialogue".

Phase I of Mandate 403 (Mandate to the European Standardisation Organisations CEN, GENELEC and ETSI in the field of Information and Communication Technologies, applied to the domain of eHealth) identified the need to develop profiles to ensure technical interoperability in the eHealth domain. Semantic Interoperability can only be achieved if eHealth systems developers and users agree on common semantic resources for different health domains, such as ontologies and terminologies, to be used. Interoperability at the organizational level will only be achieved if eHealth systems are implementing interoperable processes and functionalities.

In its communication COM(2011) 315 final, the Commission highlights the need to recognize the specifications developed by fora and consortia in order to be able to use them in public procurement, provided that these standards comply with a set of criteria based on the WTO principles, and which are the basis of the CAMSS.

2.12.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States, regional authorities	Will have a guidance to establish their own national or regional interoperability frameworks.
Systems developers	Will have a clear framework to develop interoperable systems.
Purchasers	Will have a clear framework to specify their needs and ensure the interoperability of the solutions they purchase.
Patients	Will benefit safer health care, of higher quality.

2.12.6 Related EU actions / policies

Action / Policy	Description of relation
Digital Agenda	Action 77: Foster EU-wide standards, interoperability testing and certification of eHealth
European Standardization Policy	COM(2011)311, COM(2011)315 final
eHealth Governance Initiative	WG on Interoperability, Standards, Markets
eHealth Task Force	Area of interest: Cross-Border Interoperability

Action / Policy	Description of relation
CIP-PSP	epSOS project
FP7	Hitch Project
FP7	NoE in Semantic Interoperability
CIP-PSP	eHR-Q ^{IN}

2.12.7 ORGANISATIONAL APPROACH

2.12.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	eHealth Governance Initiative
EC	DG INFSO H1, ENTR D, MARKT C4
epSOS	epSOS project coordinator
Consortia and fora	IHE, Continua Health Alliance, IHTSDO, EuroRec, HL7
SDOs	CEN, CENELEC, ETSI
Industry	eHealth Governance Initiative
Users	eHealth Governance Initiative

2.12.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Inception meeting	EC, contractor.	
eHealth Governance initiative	EC INFSO H1, WG on Standards, Interoperability and Markets.	End of the study.
Progress meetings	EC, contractor.	Every two months.
Final meeting	EC, contractor.	End of the study.

2.12.7.3 Governance approach

The contractor will be requested to:

- Liaise and interview the eHealth Governance Initiative WG on Standards, Interoperability and Markets;

- Liaise and interview the Network of Excellence on Semantic Interoperability;
- Liaise and interview the epSOS projects, particularly the technical and semantic work packages.

2.12.8 TECHNICAL APPROACH

The contractor will be required to propose a methodological approach and a plan to make the study. This methodological framework will include the understanding of key terms, concepts, regulatory and policy framework, the Common Assessment Method for Standards and Specifications, a clear plan for the study, multi-stakeholder interviews, list of experts and organisations to be interviewed, due diligence of Consortia processes, standards and rules, iterative approach, quality assurance, deliverable review process, risk management. The resources who will conduct the study will have the relevant experience in eHealth interoperability and EU standardization. If needed, the contractor will subcontract some tasks to experts in the domain.

2.12.9 COSTS AND MILESTONES

2.12.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	Deliver the plan and methodological approach of the study	13,5	ISA	Q4/2011	Q4/2011
	Draft intermediate study report	186,5	ISA	Q4/2011	Q1/2012
	Second draft intermediate study report	100	ISA	Q1/2012	Q3/2012
	Final report and publication	100	ISA	Q3/2012	Q4/2012
	Total	400			

2.12.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010			
2011		200	
2012		200	

2.12.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
eHealth Governance Initiative	http://ec.europa.eu/information_society/activities/health/policy/ehealth_governance_initiative/index_en.htm	
epSOS project	http://www.epsos.eu/	
Digital Agenda for Europe	http://ec.europa.eu/information_society/digital-agenda	
eHT-Q TM	http://ehrqtn.eurorec.org/	
eHealth Task Force	http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/551&format=HTML&aged=0&language=en&guiLanguage=en	

2.13 ESTABLISHMENT OF A EUROPEAN UNION LOCATION FRAMEWORK

2.13.1 Context

2.13.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	JRC.H06
Associated Services	ENV (F04), ESTAT (E04)

2.13.2 OBJECTIVES

The INSPIRE Directive²³ establishes an infrastructure for spatial information in Europe for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. The infrastructure is a multi-purpose infrastructure for the exchange and sharing of spatial data, meaning that it can be used for other thematic sectors as well.

The objective of the study is to create a European Union Location Framework (EULF) addressing EU-wide, cross-sectoral interoperability framework for the exchange and sharing of location data and services, compatible with the European Interoperability Framework (EIF) and the Digital Agenda for Europe²⁴ (DAE), based on INSPIRE.

The EULF will consist of a package of legal acts, methodologies, specifications and guidelines, and training material required by public administrations and stakeholder communities to facilitate the implementation, use and expansion of INSPIRE in an e-government context. The EULF will set-up an open and interoperable framework that public authorities should use for their procurement. It will complement existing INSPIRE Technical Guidance documents to facilitate the introduction and use of the infrastructure in new thematic sectors.

The study does not start from scratch. In fact, there are both on-going and completed programmes and projects at national²⁵²⁶ and international²⁷²⁸²⁹ levels that relate to the description of the EULF.

²³ Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)

²⁴ COM(2010)245 final

²⁵ UK Location Framework, <http://location.defra.gov.uk/>

²⁶ GIDEON – Key geo-information facility for the Netherlands, <http://www.rijksoverheid.nl/>

²⁷ EuroGeographics, <http://www.eurogeographics.org/>

²⁸ European Spatial Data Infrastructure with a Best Practice Network (ESDIN), <http://www.esdin.eu/>

²⁹ United Nations programme on Global Geospatial Information Management, <http://ggim.un.org/>

The action will include using existing frameworks, assess their fitness for purposes and liaise with the organizations in charge.

The study will further recommend strategies for a secure data exchange and management framework based on INSPIRE/e-government set-up in the Member States, and will contribute to a white paper on the evolution of INSPIRE/SEIS³⁰ in the context of the DAE.

2.13.3 SCOPE

Included in the scope are the following aspects:

- Development of the interoperability framework concerning aspects related to the exchange and sharing of location data and location services;
- INSPIRE Directive and related Implementing Rule Legal Acts;
- Input to the revision of the INSPIRE Directive (2014);
- Link to SEIS Implementation Plan;
- EIS/EIF;
- Recent open data initiatives such as the EU open data portal;
- Linked open data / Internet of Things;
- Volunteered Geographic Information / crowd sourcing;
- Interaction with standardisation organizations;
- Link to maintenance of the INSPIRE legal acts and Technical Guidance documents;
- Cloud computing;
- Governance of the EULF.

2.13.4 Problem/opportunity statement

COM(2010)744 mentions the INSPIRE Directive (2007/2/EC) and the related Implementing Rules Legal Acts as a sectoral example of interoperability in the area of the environment. Due to the nature of INSPIRE, its 700 stakeholder organizations are involved not only in the environmental sector, but in a large number of other sectors as well – ranging from transport to health to energy to utilities and the military. There is also a link with standardisation activities and the GI and service-provider industry.

This context creates excellent boundary conditions to create an EU location interoperability framework compatible with the EIF. This will be based on– albeit generalized – versions of the INSPIRE framework and technical guidance documents, the experience of those MS that are building INSPIRE into their national e-government frameworks, and on pan-European

³⁰ Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Towards a Shared Environmental Information System (SEIS) COM(2008)0046.

organizations and results of projects that have started activities around the concepts similar to the EULF³¹.

2.13.5 Expected beneficiaries and anticipated benefits

Beneficiaries	Anticipated benefits
Member States authorities and agencies; European bodies and institutions	Increased awareness of the importance of interoperability A recognised and coherent location framework to facilitate the exchange and sharing of location data, as well as the development and procurement of location data, and - services.
Member States authorities and agencies; European Bodies and Institutions	Increased interoperability between public administrations.
European Bodies and Institutions, Member States	Increased coherence in future EU policies .

2.13.6 Related EU actions / policies

Action / policy	Description of relation
Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE).	Legal basis for the study.
Commission Regulation (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services.	The study builds on the technical guidance of this regulation.
Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services.	The study builds on the technical guidance of this regulation.
Communication from the Commission to the European Parliament, the Council, the	<i>DAE Action 21: Propose legislation on ICT interoperability</i>

³¹ Including <http://www.eurogeographics.org/>, <http://www.esdin.eu/>, <http://www.eurogi.org/>

Action / policy	Description of relation
European Economic and Social Committee, and the Committee of the Regions: A Digital Agenda for Europe - COM(2010)245 final.	<p>Where relevant, the study results will provide recommendations for the revision of the INSPIRE Directive and for the Implementing Rules legal acts still under development. If successful, the study will clear the ground for a Commission Decision on the European Union Location Framework.</p> <p><i>Action 22: Promote standard-setting rules</i> The results of this study will rely, where possible and feasible, on European and international standards, and will involve standardization organizations.</p> <p><i>Action 23: Provide guidance on ICT standardisation and public procurement</i> The resulting framework will contain specifications and guidelines that facilitate public procurement.</p>
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions - Towards interoperability for European public services - COM(2010)744 final.	The study will directly contribute to COM(2010)744 final by facilitating interoperability for geospatial components in e-government contexts.
COM(2010)308 final Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions "Action Plan on Global Navigation Satellite System (GNSS) Applications".	The study will contribute to Action 17: The European Commission will promote the use of EGNOS and GALILEO in surveying in the Member States and third countries. The capabilities of EGNOS and GALILEO for improving the update of geographical databases will be explored by such means as exchanges of best practice and coordination among Member States.
Communication from the Commission to the European Parliament, the Council, and the European Economic and Social Committee - A strategic vision for European standards: Moving forward to enhance and accelerate the sustainable growth of the European economy by 2020 - COM(2010)0311.	The study will directly contribute to the realization of the objectives of COM(2010)0311.
Communication from the Commission to the	The study will contribute to the SEIS

Action / policy	Description of relation
Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Towards a Shared Environmental Information System (SEIS) COM(2008)0046 SEIS Implementation Plan.	Implementation Plan, in particular in the area of e-Environment services.
Directive 2010/40/Eu of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.	The EULF will enable location-based services of relevance to the transport sector.

2.13.7 ORGANISATIONAL APPROACH

2.13.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Services of the Commission	Inter-service group of ENV, ESTAT, INFSO, DIGIT, ENTR, SEC GEN, complemented with representatives of other relevant DGs (e.g., MOVE, AGRI, REGIO).
Formal INSPIRE representation in Member States	INSPIRE Regulatory Committee INSPIRE Member States Contact Points.
INSPIRE Legally Mandated Organizations (250)	LMO point of contact.
ISA	ISA Working Group on Interoperability Architecture.
Standardisation bodies (CEN, ISO, OGC, W3C, OASIS, etc.) including their relevant Focus Groups on e-Government	
Pan-European organizations	EuroGeographics, EUROGI.
Eye on Earth community	Eye on Earth Framework Committee, reps of relevant WGs.
EEA/EIONET, National environment agencies	EEA/EIONET national focal points (NFPs), National Reference Centres for Information Systems.
ESPON	ESPON secretariat.
Thematic communities	Relevant EU expert groups.

2.13.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute date of meetings
INSPIRE Conference 2012	INSPIRE stakeholders	2012-06 or 07, Turkey
EULF workshop	EULF expert group, PMB	If possible in conjunction with INSPIRE 2012
INSPIRE Regulatory Committee	INSPIRE committee members	2012-07, and as required to cast opinion on proposed IR legal acts and other matters related to INSPIRE
INSPIRE Member States Contact Points meeting	INSPIRE MSCPs	Once per year
INSPIRE Conference 2013	INSPIRE stakeholders	2013-06 or 07
Meetings of relevant standardisation groups (CEN, ISO, OGC, W3C, ..)	Standardisation	2 - 3 times / year
12th European Conference on eGovernment – ECEG 2012	eGovernment	2012-06-14 and 15, Barcelona, Spain
Dedicated ePractice workshops	eGovernment	Once per year
Eye on Earth events	Environment agencies, mapping agencies,	Once per year
INSPIRE Conference 2014	INSPIRE stakeholders	2014-06 or 07
INSPIRE/EU Location Conference 2015	INSPIRE stakeholders	2015-06 or 07
Meetings of the United Nations Committee of Experts on Global Geospatial Information Management (GGIM)	UN members	1/year
Digital Agenda Assembly		1/year

2.13.7.3 Governance approach

Steering Committee

Role and responsibilities: the Steering Committee will be responsible to monitor the execution of the study. The Steering Committee will also:

- Contribute to and review the technical annex for any call for tender issued in the context of this activity;
- Review deliverables prepared by contractors;
- Launch stakeholder consultations;

- Adjust the project planning based on new developments;
- Contribute to the communication strategy.

Composition: Due to the links with DAE in general and EIF and standardization in particular, a Steering Board will be set-up, composed of the lead services for INSPIRE (ENV, ESTAT, JRC), representatives from DIGIT, INFOS, and ENTR.

European Location Framework Expert Group

Role and responsibilities: Establish the terms of reference, identify relevant reference material to be considered by the contractor, comment on intermediate versions of the European Location Framework, identify relevant stakeholders to include in consultations on the major versions.

Composition: INSPIRE Member States Contact Points, representatives of e-government, standardisation bodies, and pan-European stakeholder organizations including EuroGeographics and EUROGI, chaired by the European Commission.

JRC

The resources provided for this study will be complemented with institutional resources from JRC through the institutional actions ENABLE 11601 and SHAPE 11602. In particular, JRC will provide the secretariat for the European Union Location Framework Expert Group. Also, results of JRC institutional work programme will feed into the EULF.

2.13.8 Technical approach

The following activities are foreseen as part of the study:

- Establishment of the European Location Framework Expert Group;
- EULF Expert Group Kick-off workshop with the main objectives to:
 - Adoption of the terms of reference of the EULF Expert Group
 - Articulation of a common vision in line with EIS/EIF and INSPIRE, and
 - Identification of reference material and good practices
- Technical annex of tender, issue call for tender;
- Drafting of version 0 (internal) of the EULF. This draft is a package of the following:
 - A vision document on the EULF
 - A report on the analysis of existing and legal acts and gaps
 - Methodologies, specifications and guidelines, and
 - Existing and new training material, including videos
- Review by EULF Expert Group, second EULF meeting;
- Identification of ownership of the EULF within the Commission ;
- Revision into Version 1 of the EULF by contractor;
- Stakeholder and public consultation (incl. Your voice in Europe), presentation of the EULF in the Parliament;

- Revision into Version 2 of the EULF by contractor;
- Endorsement of the EULF by the EULF Expert Group;
- Commission services draft a Commission Decision/Communication on the EULF;
- EC Interservice consultation;
- Adoption of Commission Decision/communication on the EULF.

2.13.9 COSTS AND MILESTONES

2.13.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
	EULF Expert Group Kick-off meeting	50	ISA	Q3/2012	Q3/2012
	EULF Version 0	250	ISA	Q1/2013	
	First EULF review meeting	50	ISA	Q2/2013	
	EULF Version 1	100	ISA	Q4/2013	
	Public and stakeholder consultation			Q4/2013	
	EULF Version 2	250	ISA	Q1/2014	
	Formal adoption of the EULF by the EULF Expert Group	50	ISA	Q1/2014	
	Commission Decision/communication on the EULF		ISA	Q2/2014	
	EULF Expert Group meeting	50		Q2/2014	
	Total	800			

2.13.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated Allocations (KEUR)	Executed Budget (KEUR)
2011			
2012	Study	300	

Budget Year	Phase	Anticipated Allocations (KEUR)	Executed Budget (KEUR)
2013	Study	450	
2014	Study	50	
2015			

2.13.10 ANNEX AND REFERENCES

Description	Reference link
Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32007L0002:EN:NOT
INSPIRE Metadata Regulation	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008R1205:EN:NOT
Commission Regulation amending Regulation (EC) No 976/2009 as regards download services and transformation service	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:02009R0976-20101228:EN:NOT
COMMISSION REGULATION implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:323:0011:0102:EN:PDF
COMMISSION REGULATION amending Regulation 1089/2010 as regards interoperability of spatial data sets and services	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011R0102:EN:NOT
Technical Guidance for the implementation of INSPIRE Discovery Services	http://inspire.jrc.ec.europa.eu/documents/Network_Services/TechnicalGuidance_DiscoveryServices_v3.0.pdf
Technical Guidance for the implementation of INSPIRE View Services	http://inspire.jrc.ec.europa.eu/documents/Network_Services/TechnicalGuidance_ViewServices_v3.0.pdf
Design Principles for UKLII	http://location.defra.gov.uk/wp-content/uploads/2010/04/UKLP-Design-Principles.pdf

3. ASSESSMENT OF ICT IMPLICATIONS OF EU LEGISLATION

3.1 ASSESSMENT OF ICT IMPLICATIONS OF EU LEGISLATION

3.1.1 Context

3.1.1.1 Identification of the action

Type of Action	Study
Type of Activity	Assessment of ICT implications of EU legislation (Art. 3 of the ISA decision)
Service in charge	DG DIGIT
Associated Services	

3.1.2 OBJECTIVES

The objective is to ensure that ICT implications of EU-legislation are taken into account in due time to allow timely, efficient and effective ICT support for the implementation thereof.

3.1.3 SCOPE

The scope is to test a method to assess the ICT implications of new legislation. The method has been developed under IDABC. It takes into account both cross border and cross-sectoral implications of proposed EU legislation.

In a first step, 2-3 pilot assessments on real-life cases are envisaged during 2010-2012 with Commission services currently drafting legislation. The pilots will be used to test the viability of the developed methodology and to further refine it. During the second phase, the refined method is envisaged to be offered to all Services drafting EU legislation from 2012 on. The method should provide policy makers and IT specialists with guidance on the assessment of ICT implications, assist the sectors of the Commission in consultation with the MSs, but also support the Member States in assessing the implications of proposed EU legislation for their own administrations.

3.1.4 PROBLEM/OPPORTUNITY STATEMENT

ICT implications of new legislation are rarely taken into account already during the drafting stage. This often leads to either sub-optimal or missing support through available technologies, resulting in unnecessary administrative burden and/or problems during the implementation phase with regard to the timeline foreseen, lacking interoperability with other systems, feasibility problems etc.

An early consideration of ICT implications increases the chances for optimal support of the implementation of legislation through ICT technologies. This way, it can ensure timely implementation, cutting administrative burden, avoid the creation of new e-barriers and support the functioning of the Internal Market.

3.1.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Commission Services	Optimal support of ICT to facilitate the implementation of legislation. Higher probability that the legislation will reach the goals foreseen and within the time foreseen. Also, by identifying ICT needs upfront, the chances for the re-use of already existing components increase.
Member States' Public Administrations	Possibility to analyse the ICT implications of EU-legislation for the implementation at *national/regional* level at an early stage. Higher probability that the legislation will reach the goals foreseen and within the timeline foreseen.

3.1.6 Related EU actions / policies

N/A

3.1.7 ORGANISATIONAL APPROACH

3.1.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
European Commission	European Commission Units in charge of drafting new legislation.

Stakeholders	Representatives
Services	
European Commission Services	European Commission Units in charge of development of information systems to support new legislation.

3.1.7.2 Communication plan

Following the completion of the pilot phase, a communication campaign aimed towards the European Commission units in charge of drafting new legislation will be organised. The campaign foresees organisation of the information seminars focusing on explanation of the methodology and giving guidelines for its application in practice.

3.1.7.3 Governance approach

The action will be run by DG DIGIT with the support of an external contractor.

3.1.8 TECHNICAL APPROACH

2010-2012 Pilot phase

The pilots will be facilitated by DIGIT B2 with the support of a contractor.

The assessment will be offered for expert groups of policy makers, lawyers and ICT specialists of 2-3 DGs which are currently drafting legislation. The sessions will be guided by a facilitator who is experienced in applying the method.

Starting with a pre-assessment regarding the intensity of the expected implications, the group will decide if a light, medium or full assessment of the legislation is needed. Following this, the facilitator will guide the expert group through the assessment process by using the tools and checklists which have been developed, to analyse the ICT implications of legislation in a structured way.

At the end of the pilot, participating DGs should have received a sound assessment of the ICT implications of their legislation. The method will be further refined with the experiences collected during the pilots.

2012-2015

Roll-out of the ICT implication assessment method to all participating DGs through training and support with a view to ensuring that the assessment becomes an integral part of the impact assessment process in the European Commission in the long run.

3.1.9 COSTS AND MILESTONES

3.1.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Study	3 Pilot assessments Refinement of method and elaboration of tools	150	ISA	Q03/10	Q2/2012
Study	9-18 assessments with different Commission Services	1.000	ISA	Q3/2012	Q4/2013
Study	6-12 assessments with further Commission Services	600	ISA	Q02/13	Q4/2015
	Total	1.750			

3.1.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		150	42
2011		400	150
2012		300	
2013		300	
2014		300	
2015		300	

3.1.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

4. ACCOMPANYING MEASURES

4.1 RAISING INTEROPERABILITY AWARENESS

4.1.1 RAISING INTEROPERABILITY AWARENESS – COMMUNICATION ACTIVITIES

4.1.1.1 Context

4.1.1.1.1 Identification of the action

Type of Action	Accompanying measure
Type of Activity	Awareness raising
Service in charge	DG DIGIT
Associated Services	

4.1.1.2 OBJECTIVES

The objective of the communication activity is to establish an overall communication strategy for the ISA programme and implement a strategy-based communication programme over the full duration of the programme.

The communication programme will cover both campaigns at programme level and activity specific campaigns based on communications plans developed for specific issues or activities addressed by the ISA programme or the ISA work programme. The ISA communication activity aims both at involving stakeholders in the programme and at promoting and informing about programme related issues and activities in a consistent and holistic way with a view to increase the effectiveness of the programme.

4.1.1.3 SCOPE

The communication activity covers issues and activities related to the ISA programme and spans the whole communication process right from the establishment of a global strategy to its implementation at action level through the holding of conferences, workshops etc. and the publication of folders, magazines etc.

As a consequence, it will also cover all aspects of the European Interoperability Strategy (EIS), including the accompanying measure on "Interoperability Awareness". The activity will encompass both one-way and two-way communication.

4.1.1.4 PROBLEM/OPPORTUNITY STATEMENT

To achieve its objectives the ISA programme needs to communicate extensively with its stakeholders, as required by Article 14 of the ISA Decision, with a view to both establishing needs and promoting solutions supported or developed under the programme.

Through consistent and coherent communication efforts a stronger buy-in and a broader take-up can be achieved, which in turn will increase the effectiveness of the programme.

4.1.1.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations	Through involvement in the programme, Member State administrations may influence the focus of the programme and the solutions supported and offered. Awareness of ongoing activities and solutions offered will allow Member State administrations to align in due time and profit from generic and reusable solutions, which in turn is likely to increase their efficiency and effectiveness.
European Commission services	Through involvement in the programme, Commission services may influence the focus of the programme and the solutions supported and offered. Awareness of ongoing activities and solutions offered will allow Commission services to align in due time and profit from generic and reusable solutions, which in turn is likely to increase their efficiency and effectiveness.
Other stakeholders, first and foremost the ICT community	Through involvement in the programme, other stakeholders may influence the conception of the solutions supported and offered. Awareness of ongoing activities and solutions offered will, whenever appropriate, allow other stakeholders to align in due time, profit from generic and reusable solutions and better adapt their solutions to the needs of administrations.

4.1.1.6 Related EU actions / policies

N/A

4.1.1.7 ORGANISATIONAL APPROACH

4.1.1.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
National public administrations	ISA Committee ISA coordination group ISA working groups
Regional and local administrations	Relays: ISA Committee ISA coordination group ISA working groups Associations of regional and local administrations
ICT community	Companies advising public administrations on ICT strategies Companies building custom made ICT solutions for public administrations Companies building ICT infrastructure and products
European Commission services	IRM (information resource manager) networks in the DGs Director-General of DG DIGIT

4.1.1.7.2 Communication plan

Communication campaigns using both traditional print and electronic media as well as social media will be organised to engage politicians and senior policy makers in the IT domains and in other policy domains. Both national public administrations and regional and local administrations will be targeted.

Communication campaigns mainly using electronic and social media will address the IT practitioners in European, national, regional and local public administrations, as well as practitioners in the ICT communities.

4.1.1.7.3 Governance approach

The communication activity will be run by DIGIT with the support of an external contractor. Regular reviews of the ISA communication strategy will be organised based on the monitoring and evaluation of the communication impact.

4.1.1.8 TECHNICAL APPROACH

In a first phase, a global communication strategy for the ISA programme was developed and a communication campaign on ISA established. This global strategy and the related ISA communication campaign make up the common foundation for communication activities at action level.

The global communication campaign on ISA is currently implemented as part of a second phase. While the global communication campaign will run continuously for the duration of the programme, campaigns for specific actions and solutions are, whenever appropriate, developed and related communication plans implemented at various points in time throughout this phase, in function of the maturity of the action in question.

The communication strategies and plans, which will continuously be updated and revised to cater for changing needs, will detail the objective(s), the stakeholder to involve, the message(s), the channels etc., and consequently encompass inter alia means, like workshops, info-days, collaborative platforms and websites, and publications, like folders, magazines, DVD's and video clips. For actions not mature enough for detailed communication plans, communication activities will be defined ad-hoc based on evolving needs, e.g. for interactions with stakeholders through workshops and consultations.

Certain activities will need to be implemented already during the first phase, e.g. the ISA website, info-days and folders.

4.1.1.9 COSTS AND MILESTONES

4.1.1.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Execution Phase 1	Development of a communication strategy and communication plan at ISA programme level	56,8	ISA	Q3/2010	Q1/2011

Phase: Inception Execution Operational	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 Phase 2	Implementation of the Communication campaign and programme at ISA programme level: design of communication strategies, plans and implementation of information campaigns at individual action level	6.193,2	ISA	Q3/2010	Q4/2015
	Total	6.250			

4.1.1.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Execution	1.050	1430
2011	Execution	1.100	720
2012	Execution	800	
2013	Execution	1.100	
2014	Execution	1.100	
2015	Execution	1.100	

4.1.1.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

4.1.2 INTEROPERABILITY MATURITY MODEL (*FUNDING CONCLUDED*)

4.1.2.1 CONTEXT

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	DG DIGIT
Associated Services	

4.1.2.2 OBJECTIVES

The objective of this action is to define a European Interoperability Maturity Model that can be consistently applied throughout the different European public administrations.

The action's legal basis comes from articles 3 and 7 of the ISA Decision, that specify that the ISA Programme shall support and promote the establishment of common frameworks in support of cross-border and cross-sectoral interoperability by means of studies.

4.1.2.3 SCOPE

As the framework will be used both as a tool and a guide to identify needs in interoperability in the Member States, the action shall investigate the existing practices in Member States and then develop a maturity model and a tool for self-assessment.

The action has been identified as part of the "Raising Interoperability Awareness" accompanying measure to the EIS that establishes the need to "develop an interoperability maturity level self-assessment tool/model for public administrations" (paragraph 14.6).

4.1.2.4 PROBLEM/OPPORTUNITY STATEMENT

The Digital Agenda for Europe has identified the lack of interoperable applications as a major obstacle for growth. Although Member States have significantly worked in this domain, it is difficult to assess the progress made so far by each public administration.

The development of an interoperability maturity model would help towards the vision established in the EIS both raising interoperability awareness and providing a tool for public administrations to assess their interoperability readiness. In turn, this action will be complemented, so as to provide public administrations a tool for gap analysis of dos/don'ts when creating or establishing a European Public Service.

4.1.2.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations	Assess their interoperability maturity against a common framework. In turn, this will also contribute to identify current interoperability gaps in public service provision.

4.1.2.6 ORGANISATIONAL AND TECHNICAL APPROACH

As the notion of subsidiary is important in this focus area, the role of the Commission is to coordinate efforts and to steer a possible common approach, taking also into consideration inputs from other stakeholders (industry and other organisations).

First, a study will investigate what has been done in the field of interoperability maturity models from national and international perspectives, focusing specially in those models that have been successfully applied in practice. The action may propose a set of best practices and use cases of such a series of models.

Building on the previous effort, the action will also propose a European Interoperability Maturity Model that will be made explicit through a self-assessment tool for Public Administrations throughout Europe.

In so doing, the action shall consider a later use of the model: to identify interoperability gaps in the provision of future or current European Public Services (EPS). As such it will consider at least the organisational and service (in the sense of EPS) perspectives.

4.1.2.7 COSTS AND MILESTONES

4.1.2.7.1 Breakdown of anticipated costs and related milestones

Phase:	Description of milestones reached or to be reached	Anticipated allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Phase 1	European Interoperability Model	300	ISA	Q3/2011	Q1/2012
	Total	300			

4.1.2.7.2 Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
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Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	-	-
2011	300	
2012		
2013		
2014		
2015		

4.2 SHARING OF BEST PRACTICES

4.2.1 INTEGRATED COLLABORATIVE PLATFORM - JOINUP

4.2.1.1 Context

4.2.1.1.1 Identification of the action

Type of Action	Project
Type of Activity	Common Service
Service in charge	DIGIT.A3
Associated Services	DIGIT.C

4.2.1.2 OBJECTIVES

Enable a more efficient interaction between now separate communities by providing a central place for collaboration.

Lower the cost of maintaining the service by co-locating similar technical services into a common technical platform to minimize engineering, development and operational costs, to ease service management and to search for synergies towards end-users.

4.2.1.3 SCOPE

To develop and provide a common technical platform offering a set of e-Government services similar to those currently offered by the disparate three e-Government collaboration and information sharing platforms: SEMIC.eu, OSOR.eu and ePractice.eu.

The housing/hosting of this new platform at the EC and the provision of the technical support.

Technical support for the content migration.

SEMIC.eu and OSOR.eu will have migrate to the new platform – Joinup - by Q4 2011. E-Practice.eu is foreseen to be migrated later in 2012..

4.2.1.4 PROBLEM/OPPORTUNITY STATEMENT

Integration of disparate platforms makes only sense if these platforms have potential synergies.

The SEMIC.eu, OSOR.eu and ePractice.eu platforms share common elements:

- All of them are related to the use of information technology in public administrations;
- All of them are based on similar Web 2.0 technologies (e.g. content management systems, forums, blogs, wikis, etc.);
- They target different domains; however there is considerable overlap in the target population, shown in the user analysis;
- All of them have similar supporting requirements (e.g. hosting services, helpdesk) , which may be shared;
- They address similar user needs (reading case studies, news items, searching content, interact with other users – forums, blogs, comments);
- From a business point of view, the needs are different (e.g. content on semantic assets versus content on open source projects), but overlaps between them exist (e.g. most of the open source projects for public administrations use semantic assets).

All these similarities hint that partial integration among the platforms makes sense.

For this reason, a business opportunity arises from two sources:

1. From an operational point of view, having an integrated platform will require less financial and human resources for the management of the underlying technical platform due to:
 - Sharing operation and maintenance cost among the three platforms;
 - Sharing of development costs among the three platforms.
2. From a user point of view, having an integrated platform would enable the Commission to provide better, integrated services to the users of the platforms:
 - Common user authentication;
 - Coverage of topics that are related to multiple domains (e.g. semantic and open source domain);
 - More user friendly providing a coherent and similar set of services for all the content regardless of the domain (e.g. ePractice.eu users would transparently

access the current OSOR.eu repository, SEMIC.eu users willing to read cases on eProcurement would find these transparently from ePractice content).

4.2.1.5 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.

4.2.1.6 Related EU actions / policies

Action / Policy	Description of relation
Digital Agenda	<ul style="list-style-type: none"> ○ MSs are suggested in part 2.7.4 to “<i>Make eGovernment services fully interoperable, overcoming organisational, technical, or semantic barriers ...</i>”. The Action tries to provide a platform to facilitate the development of interoperable components.
eGovernment Action Plan	<ul style="list-style-type: none"> ○ 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”.

4.2.1.7 ORGANISATIONAL APPROACH

4.2.1.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States' public administrations	<ul style="list-style-type: none"> ○ ISA Committee ○ ISA Coordination Group ○ ISA expert group ○ Representatives of national repositories
European Commission DIGIT	Service provider for hosting/house services and project evolution

4.2.1.7.2 Communication plan

Event	Representatives	Frequency of meetings / Absolute dates of meetings?
	ISA Exchange of best practice expert group	1-2 times per year.
Survey on future improvements	Users of the platform, national repositories	1-2 times per year. 1 st – Q4 2011.
Enhanced federation	Action 4.2.2 Community building and action 1.1 SEMIC	Once. The requirements of the member states will be collected and analyzed through the Community building and SEMIC actions.

4.2.1.7.3 Governance approach

The project will be managed by the Commission (DIGIT.B2, DIGIT.A3 and DIGIT.C).

The strategic decisions with regards to the direction of further developments will be influenced by the end-users and other stakeholders of the platform, either by use of direct surveys, or by means of representatives. Actions 4.2.2 Community building, 1.1 SEMIC and the European Federated Interoperability Repository will represent the need of their respective users and stakeholders.

While until 2012, the provision of the Integrated Collaborative Platform "*Joinup*" as a platform was done under action 4.2.1, Community building, from 2012, the Commission has decided to integrate both tasks related to the development of the platform as a reusable generic tool and to the provision of the platform as a common service under one action.

4.2.1.8 TECHNICAL APPROACH

In summary, the project will contain three major work-packages:

1. the definition of a common architecture and the implementation of a common platform;
2. the provisioning of a common technical service offering similar functionalities as today provided by the three sites together (SEMIC.eu , OSOR.eu and ePractice.eu). All current services which are used by the users will be included in the future platform;
3. the development of missing features and services necessary for the implementation of the NIFO action (4.2.3).

The targeted common technical platform is based upon existing Open Source Software packages and re-uses expertise and components of the Flexible Platform For Internet Services (FPFIS) environment at the Data Centre of the European Commission.

The action has implemented the Inception phase, and is currently finishing the Execution phase with the delivery of the final platform in Q4 2011.

The migration of the content from SEMIC.eu and ePractice is done within the scope of action 4.2.1 Community building and is expected to end by Q4 2011.

In the operation phase, between Q42011 and Q42012, the main directions for further developments will be decided based on direct surveying of end-users and national repositories and on bilateral discussions of the actions which use the Joinup platform:

- further enhancement / bug fixing based on user survey;
- enhanced federation of semantic assets (see action 1.1 SEMIC);
- enhanced federation of open source projects (see action 1.1 SEMIC);
- enhanced and structured dissemination of interoperable assets (see action European Federated Interoperability Repository);
- the development of needed technical features and services for the NIFO action (4.2.3).

4.2.1.9 COSTS AND MILESTONES

4.2.1.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Detailed systems specifications and project plan	50	ISA	Q3/2010	Q3/2010

Execution	Implementation of the new integrated collaboration platform	500	ISA	Q3/2010	Q3/2011
Operational	Provision of the common service	800	ISA	Q2/2012	Q4/2015
Operational	Maintenance and Improvement of the tool	777	ISA	Q3/2011	Q4/2015
Operational	Support of the current platforms (OSOR.eu and SEMIC.eu)	400	ISA	Q3/2010	Q4/2011
	Total	2.527			

4.2.1.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Inception	50	693
2010	Execution	456	
2010	Operational (old platform)	200	
2011	Execution	44	174
2011	Operational (maintenance and improvement)	131	
2011	Operational (old platform)	200	
2012	Operational (maintenance and development)	250	
2012	Operational (provision)	200	
2013	Operational (maintenance and development)	132	
2013	Operational (provision)	200	
2014	Operational (maintenance and development)	132	
2014	Operational (provision)	200	
2015	Operational (maintenance and development)	132	
2015	Operational (provision)	200	

4.2.1.10 ANNEX AND REFERENCES

Description	Reference link	Attached document



4.2.2 COMMUNITY BUILDING AND EFFECTIVE USE OF THE COLLABORATIVE PLATFORMS

4.2.2.1 Context

4.2.2.1.1 Identification of the action

Type of Action	Accompanying Measures
Type of Activity	Stakeholder involvement
Service in charge	DG DIGIT
Associated Services	DG INFSO

4.2.2.2 OBJECTIVES

The aim of this action is to enable and support a more efficient interaction between communities by providing a central place for collaboration and reducing the complexity of the supporting platform and reducing operational costs. This will both improve the user experience as collaborative tools and communities come under one roof and increase the collaboration between people involved in the design, establishment and operation of public services.

4.2.2.3 SCOPE

This action covers one of the priority areas of the European Interoperability Strategy which is the sharing of best practices among public administrations. As a result, it will not only focus on the building of new communities but also of maintaining already existing ones around best practices, sharing and re-use of common solutions. New communities resulting from other interoperability measures will also be supported. These communities will not be enclosed for collaboration within the EU but opportunities for outside the EU collaboration will be supported.

4.2.2.4 PROBLEM/OPPORTUNITY STATEMENT

Most of the interoperability measures taken, lessons learnt and solutions developed by public administrations are having a national scope and focus. Cross-border interoperability, the re-use of best practices and solutions is not possible without providing European level visibility to such practices and support for just developing European communities around the notion of interoperability.

Since the ambition level of all countries is high and eGovernment appears to be present on all political agendas, this opens a window of opportunity for the ISA programme to support community building activities which are key to promote collaboration between EU public administrations.

4.2.2.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
People working in the relevant areas and their organizations	Better knowledge about developments / best practices elsewhere opportunity to share their knowledge / solution with other or to re-use others solutions; Opportunities to work together with others on common problems; Better, more effective and efficient public services via sharing, re-use and collaboration.

4.2.2.6 Related EU actions / policies

Action / Policy	Description of relation
ISA Action 1.1 – Methodologies for the development of semantic assets	Hosts and manages the communities for this action.
ISA Action 4.2.3 – NIFO	Hosts and manages the communities for this action.
ISA ACTION 4.2.1 – ISA Integrated collaboration platform	The Integrated collaboration platform offers is technical place to host the activities of the Community Building action.

4.2.2.7 ORGANISATIONAL APPROACH

4.2.2.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	Member State Experts

Stakeholders	Representatives
Communities of Practice	ELANET

4.2.2.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Webinar	Community Members and facilitators	Twice annually
Workshop	Community Members and facilitators	Annually
Exchange of Best Practice Working Group	Member States experts	Annually

4.2.2.7.3 Governance approach

The action will be a continuation of the content dissemination and community animation related tasks of the OSOR, NIFO, and SEMIC projects launched under the IDABC programme.

The action will be run in close collaboration with the following actions:

- *Integrated Collaborative Platform* which will provide the technical platform on which most of the services within this action will be provided;
- *Semantic Assets Development Methodologies* which will provide domain specific expert advices, guidelines as well as ad-hoc services, while the current action will provide more generic community related services.

4.2.2.8 TECHNICAL APPROACH

The action will be a continuation of the content dissemination and community animation related tasks of the OSOR, NIFO, and SEMIC projects launched under the IDABC programme and continued in the ISA programme.

The action will build on four main pillars:

1. Collection, preparation & distribution of relevant information (news items, case studies, fact sheets) in the following domains, using either ePractice or the future common platform for dissemination:

- Interoperability and eGovernment in General;
- OSS in public administrations;

- eProcurement (see also action 2.11 promoting consistent EU e-procurement monitoring and performance in support of the EU E-procurement Action plan and its follow-up) ;
- Semantic interoperability (see also action Methodologies for the development of semantic assets);
- eSignature / eID;
- National Interoperability Frameworks Observatory (NIFO).

2. Open source repository animation of the OSS communities by participation at conferences and other events and by supporting virtual communities on the Common Collaboration platform and ePractice support the collection of OSS IT solutions collaboration with other international, national and regional repositories.

3. Collaborative tools providing guidelines on how to use the collaborative tools providing ad-hoc coaching and other type of consultancy moderating online discussions and workshops.

4. Organizing of real-life events to support communities. Organizing workshops/conferences around different themes to support the emerging and strengthening of communities through knowledge sharing. The activity will use Joinup, the new Integrated Collaboration Platform, as a technological basis together with other social networks and media in order to achieve a higher impact on the targeted audience. Work will be supported and guided by specialist groups of the specific sectors (Semantic interoperability, eGovernment, OSS, etc.).

4.2.2.9 COSTS AND MILESTONES

4.2.2.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Content provision, Moderation of online discussions, supporting online communities and support for existing communities, showcasing of best practices.	4.336	ISA	Q4/2010	Q4/2015

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Provision of the ISA integrated collaborative platform (providing the platform as a common service)	414	ISA	Q1/2011	Q1/2012
	Total	4.750			

4.2.2.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Operational	450	450
2011	Operational	1.300	
2012	Operational	900	
2013	Operational	700	
2014	Operational	700	
2015	Operational	700	

4.2.2.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

4.2.3 NATIONAL INTEROPERABILITY FRAMEWORK OBSERVATORY – NIFO

4.2.3.1 Context

4.2.3.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	DIGIT 01
Associated Services	

4.2.3.2 OBJECTIVES

The NIFO was first launched as a pilot phase in December 2008 to first focus on developing a comparative model of the existing National Interoperability Frameworks (NIFs). Under Phase 1 the comparative model has been tested with three NIFs. The result of this Phase 1 has resulted in a well-structured yet pragmatic Analytical Model that has formed the basis for Phase 2. The focus of Phase 2 was to cover the remaining countries in scope and analysing them with the Analytical Model. Phase 2 has been completed however the need to take a further step in NIFO is necessary to support the alignment of the NIFs with the European Interoperability Framework (EIF).

The objectives of the NIFO are:

- Define a NIFO maintenance process so as to keep a continuous updated Observatory, which will feed into new factsheets with the validated information from both the high-level and the detailed analyses;
- Revise the NIFO analytical model to include principles of the EIF;
- Bring closer the NIFS to the EIF and to each other.

4.2.3.3 SCOPE

This action will cover all EU public administrations, EEA countries and Candidate Countries with whom a Memorandum of Understanding regarding their participation in the ISA programme has entered into force. In all this makes a total of 34 countries.

4.2.3.4 PROBLEM/OPPORTUNITY STATEMENT

The NIFO has been set up to provide an observatory of NIFs based on an analytical model allowing a comparison of different aspects of these frameworks. This tool enhances the experience and the knowledge sharing, improves awareness of the NIF and speeds up its development in Europe.

The momentum around the work on Interoperability has grown rapidly in the last years, through the work done by the IDABC work programme³². National EU public administrations are now more aware about the benefits of interoperability both for the creation of a Single Market and also for their citizens. However, although most of the countries within scope have an ongoing initiative on Interoperability, only 17 EU public administrations have a full blown NIF. Different national EU public administrations have different interoperability maturity levels. This may be because of a number of challenges including the different national legislation, country specifics, different political commitment level etc. On the other hand the EU Commission, through its commitment to achieve interoperable cross border eGovernment services via the ISA programme, will be soon publishing the new version of the EIF which fulfils the next milestone in line.

The Digital Agenda makes reference to the EIF and recommends the EU public administrations to apply the framework at national level by 2013.

This context presents a number of opportunities to the EU public administrations and the EU Commission to collaborate and work together specifically to make sure significant progress on interoperability is achieved by taking all contextual factors into account, align their interoperability initiatives with the EIF and each other and make the NIFO a continuously maintained process. As a result of this alignment, the core concepts and the approach of the NIFs will become more similar in nature to each other, facilitating collaboration between EU public administrations at all levels.

4.2.3.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
EU public administrations	The NIFO action will provide guidance and support both for the development of new NIFs and the alignment of current interoperability initiatives to the EIF.
National Experts and Policy Officers	NIFO acts as an input to decision processes in national developments and national policy officials may require an objective overview of the European situation and the position of their member state in the spectrum of the development of the NIFs.

³² <http://ec.europa.eu/idabc/>

Beneficiaries	Anticipated benefits
ICT Industry	Organisations that are involved in the realization of e-Government solutions like service integrators and software vendors. Driven by long lead times of solutions, commercial enterprises may have the requirement to have insight into the status of NIF developments across Europe.
EU Commission	Policy-makers that require insight in the current state of the NIF into the various countries in order to develop European wide policies. As a consequence of the mission of the ISA program, the European Commission needs an overview of the status of the developments in the EU public administrations.

4.2.3.6 Related EU actions / policies

Action / Policy	Description of relation
European Interoperability Framework	The NIFO will support Member States to align their NIF to the EIF as recommended in the Digital Agenda.
ISA Action 1.1 – Methodologies for the development of semantic assets	As semantic Interoperability is one of the components in the National interoperability Frameworks, the two actions will collaborate closely together to provided feedback to each other accordingly.
ISA Action 4.1.2 - Interoperability Maturity Model ³³ .	The results of the comparative analysis will be used as an input to this action of the ISA work programme.

4.2.3.7 ORGANISATIONAL APPROACH

4.2.3.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	National Experts and National Policy Officials
European Commission	Officials

³³ The Interoperability Maturity Model is an accompanying measure which will support Member Sates to identify the needs in interoperability. For more information, see Action 4.1.2

Stakeholders	Representatives
Non-European public administrations	National representatives
ICT Industry	Industry associations

4.2.3.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Workshop	National Interoperability Framework experts from the Member States	Q4 / 2011

4.2.3.7.3 Governance approach

The establishment of a maintenance process permits the Observatory to keep as up to date as possible. This is possible through the pro-active approach to gather new developments within the Interoperability domains of the public administrations.

This action needs a lot of support from the public administrations especially in the successive years as they will be required to input the data accordingly. The Commission will eventually take more of a co-ordination role giving the administrations more of a leading role. The main contact points for this action will be the officials nominated by the Public administrations and the experts of the Sharing of Best practices working group.

4.2.3.8 TECHNICAL APPROACH

The NIFO action will have close ties to the EIF, and although there is no directly related ISA action on the latter, the NIFO needs to reflect any changes and reviews done to the EIF during the lifetime of the ISA programme.

The online presence of the NIFO will be through Joinup.ec.europa.eu³⁴ which will include all the necessary information like the factsheets and analytical model. This is planned for 2012.

A continuous maintenance process for the NIFO has been defined that make sure that the information provided by the NIFO is timely and accurate. This will also be reflected in the updates of the factsheets themselves.

³⁴ See Action 4.1.1 ISA Integrated Collaborative Platform

In order to provide the necessary assistance to the EU public administrations to apply the EIF at national level, the analytical model will be update to permit public administrations to compare their NIF to the EIF and as a result highlights the differences. This gap analysis will also be useful to the EU public administrations to understand the actions to be taken. The results of this analysis will also be used as an input to another action of the ISA work programme, the Interoperability Maturity Model³⁵.

A prerequisite for the success of this action is the direct involvement of the EU public administrations and therefore the participation of the latter will be done via the Exchange of Best Practices working group.

4.2.3.9 COSTS AND MILESTONES

4.2.3.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Execution	Definition of the NIFO maintenance process; Gap Analysis study between the NIFs and the EIF; Support of alignment of NIFs to the EIF through the development of guidelines.	200	ISA	Q2/2011	Q4/2011
Operational	Maintenance of the NIFO process including the update of the eGovernment factsheets; Provision of support to the MS in the alignment of the NIFs to the EIF and development of new NIFs	250	ISA	Q2/2012	Q2/2013

³⁵ The Interoperability Maturity Model is an accompanying measure which will support Member States to identify the needs in interoperability. For more information, see Action 4.1.2

Operational	Maintenance of the NIFO process including the update of the eGovernment factsheets.	500	ISA	Q3/2013	Q4/2015
	Total	950			

4.2.3.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		-	
2011	Execution	200	200
2012	Operational	250	
2013	Operational	175	
2014	Operational	175	
2015	Operational	150	

4.2.3.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

4.2.4 EUROPEAN FEDERATED INTEROPERABILITY REPOSITORY (EFIR)

4.2.4.1 Context

4.2.4.1.1 Identification of the action

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG DIGIT
Associated Services	

4.2.4.2 OBJECTIVES

The Action should coordinate and support relevant work in Actions 1.1 and 4.1.2 in order to provide a European Federated Interoperability Repository (EFIR) within the context of the Joinup platform, which contains important interoperability assets of the Member States.:

- *Repository*: The Action shall provide a reusable tool (a software system), which allows the Member States to manage their interoperability assets on a national/regional level and to share these assets with the European Union and with each other.
- *Interoperability assets of the Member States*: The repository should come with an initial set of interoperability assets coupled with the identification of challenges, conflict areas and opportunities for alignment amongst interoperability assets across Europe.

EFIR will concentrate on content (interoperability assets) rather than on collaboration.

It will be implemented as an extension to the existing Joinup repository which currently covers the documentation of semantic and OSS interoperability (IOP) assets only.

The EIFR is on one side a common (central) service run by the European Commission and on the other side a re-usable generic tool, downloadable and usable by national public administrations as part of the Joinup platform (see action 4.2.1). The information hosted on the repository facilitates development of common services.

4.2.4.3 SCOPE

The EFIR should document and make available interoperability assets of the Member States, the European Commission, with the possibility to host assets from other International Organizations, including standardization activities and bodies. By interoperability assets we mean methods, techniques, guidelines, standards, specifications and software artefacts but a concrete definition and taxonomy of different types of IOP assets is foreseen as part of this work. The listed assets will be clearly organised according to the four level of EIF 2.0., including technical and semantic

interoperability assets (e.g. standards, metadata schemata), organisational interoperability assets (e.g. business processes) and legal interoperability assets (e.g. guidelines on how to achieve legal interoperability, decisions, laws).

The repository itself will become a valuable information source, which can be used by the Member States to boost their interoperability activities. It will also serve as a tool to identify challenges and alignment opportunities for IOP asset management at a European level. Given the focus of the repository and its structure along the four EIF 2.0 interoperability levels, the project contributes to establishing an interoperability architecture in the Member States.

4.2.4.4 PROBLEM/OPPORTUNITY STATEMENT

Currently, there is no European access point which provides detailed up to date information on all types of interoperability assets of the Member States. Although some of the interoperability assets are already listed in EU portals, these portals concentrate either on a specific EIS layer (e.g. semantic layer for SEMIC.eu) or provide high-level information, which is of limited use when implementing an interoperability architecture in the Member States (e.g. NIFO).

The main challenge of the proposed EFIR is to get relevant interoperability assets from the Member States and to keep this information up to date. To get this input, the Member States should be encouraged to directly use this repository for documenting their national IOP assets. In cases where there are already repositories with IOP assets, MSs should be encouraged to map their own asset descriptions to the metadata schema to be adopted by the EFIR, called Asset Description Metadata Schema (ADMS) and export the information about their IOP assets into a machine-readable format. This information will be then collected and be available for querying, browsing etc in EFIR through the Joinup platform and other national platforms via a standardized interface. With this approach a light-weight, flexible and not hard-coded federation of IOP assets will become available via the Joinup platform. Member States should be released from the burden to report their NIF activities to the NIFO project. In addition, the project should link and integrate existing data sources such as SEMIC.eu, OSOR.eu, but also national platforms such as digitalizer.dk or www.xrepository.deutschland-online.de to reduce the burden for the Member States to report this data (again).

4.2.4.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States	Member states get access to a set of interoperability assets that can be re-used in their NIF. Assets 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. Since EFIR is a federated repository, Member States

Beneficiaries	Anticipated benefits
	<p>can seamlessly exchange interoperability assets with EFIR and their local installations of the platform. A light-weight federation with non-EFIR repositories will become available via the ADMS specification for describing IOP assets.</p> <p>EFIP allows analysing the strengths and weaknesses of the Member States in specific interoperability areas.</p>
European Union	<p>The EU would use the platform to promote EIS, EIF and 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.</p> <p>The European Commission is expected to use the platform to document also its own IOP assets. Since the repository focuses on content rather than on collaboration, more detailed analysis and comparisons of the NIFs could be made and, hence, the conclusions from that analysis would be more substantial.</p>
European Software Industry	<p>The access to business processes, communication protocols, guidelines and techniques allows the European software industry to develop products, which fit the needs of the governments more closely. Therefore, the proposed repository fosters the creation of an innovative European software market offering interoperable products.</p>
European Industry (excluding Software Industry)	<p>Publishing communication protocols, guidelines and standards freely and on a central portal would allow for the European industry to adapt their software systems easier to governmental needs. This frees the European industry from the burden to implement proprietary standards and software systems enforced by European or national legislation and reduces the dependence of the European industry from software vendors.</p>

4.2.4.6 Related EU actions / policies

Action / Policy	Description of relation
Digital Agenda	<p>Interoperability and standards is a cornerstone of the Digital Agenda. Having access to interoperability assets of all levels and all member states is, therefore, a big step forward in implementing the Digital Agenda.</p>
eGovernment Action Plan	<p>Interoperability is a pre-condition to establish eGovernment. Given the scope of the project, it directly contributes to fulfilling this pre-condition.</p>

Action / Policy	Description of relation
NIFO	The NIFO project collects and publishes the Member States' efforts to implement national interoperability frameworks. Having implemented the proposed project will lead to a reduction of the effort of manually collecting data for the NIFO project. By effort we do not only mean the effort of the European Commission but especially the efforts of the Member States to deliver that information. The NIFO project in turn could concentrate on compiling and comparing the information and to derive more accurate and more up-to date recommendations for future work on the EIS implementation.
e-Practice.eu	e-Practice.eu is mainly an information and collaboration portal but it focuses more on information about events and best-practice cases than on interoperability assets.
SEMIC.eu	SEMIC.EU is Europe's Semantic Interoperability Centre. The portal lists many important standards for information exchange. It covers well the semantic layer in EIF 2.0. However, SEMIC.eu lacks the other layers, especially the legal and organisational layers. The work conducted in SEMIC.EU for the definition of the Asset Description Metadata Schema will be reused and extended to cover IOP assets from other EIF layers.
CAMSS project	The CAMSS project develops guidelines on how to evaluate standards and encourages Member States to exchange and reuse such evaluations. The guidelines as well as the specific national evaluations should become interoperability assets, which should be stored on the platform.
ISA integrated platform (Joinup).	The Joinup platform will host the EIFR and provide the necessary User Interface and querying mechanism.

4.2.4.7 ORGANISATIONAL APPROACH

4.2.4.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
European Union	COM (e.g. ISA Coordination Group)
Member States	Public Administrations
Regional Municipalities	
Software Industry	
Other Industries	

Stakeholders	Representatives
(non software)	

4.2.4.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
Regular meeting	ISA Working Group on Interoperability Architecture	The project should directly report to ISA in its project meetings. The project should also be controlled by ISA.
Requirements specification workshop	ISA IA WG + National Experts on MS interoperability portals	April/May 2012 (around the middle of the specification period in order to have some preliminary specs to present and discuss). Could be combined with a regular WG meeting.
Newsletter on the project's website reporting the status of the project.	Interested public	Once every 3 months
Information day	Interested public	After the first and final launch of the platform.
Related projects	Project members	After kickoff, the first and final launch of the platform; Short presentations in the regular meetings of the related projects.

4.2.4.7.3 Governance approach

The project will be lead by the European Commission reporting to the European Interoperability Architecture Working Group. It is strongly recommended that Member States will be invited to specify their requirements for such a system and to specify systems, which they would like to connect with the envisioned platform. In addition, selected Member States will be invited to participate in the pilot test of the platform. Member States using the platform in their countries may not deliver any interoperability-related information to EU initiatives (especially NIFO) as these initiatives should use the data of the envisioned platform.

The key players in this project are: The European Commission (project lead), and the Member States (client, data delivery).

4.2.4.8 TECHNICAL APPROACH

The project will be organised in 8 phases as detailed in the following:

- Phase 1 provides the state of the art in existing repositories and platforms, which already host interoperability assets, including the Joinup platform.
- Phase 2: The functionalities of each platform will be analysed to gather requirements. By the end of this phase the additional requirements needed should be identified and this should lead to functional specifications for possible extensions of the Joinup repository in order to cover all types of assets. This phase will also identify member states for the pilot phase.
- Phase 3: An extension and/or instantiation of the ADMS specification will be drafted to include in its scope not only technical and semantic but also legal and organizational types of IOP assets.
- Phases 4: The Joinup repository will be extended as prescribed in the new functional specifications.
- Phase 5: federates existing interoperability assets from the pilot Member States.
- Phase 6 foresees an adjustment of the requirements, and functionalities so that the platform (meaning here the EFIR together with the querying, indexing, browsing and generally UI infrastructure) can address the needs of the pilot members.
- In Phase 7, the platform will be released to the public as part of the Joinup portal.
- In Phase 8 the action will identify, collect, document IOP assets from various member states and European and International Agencies, These assets will be processed to identify initial challenges, overlaps and possible alignment opportunities.

4.2.4.9 COSTS AND MILESTONES

4.2.4.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	(1) State of the art analysis of existing interoperability portals	90	ISA	Q2/2012	Q3/2012
Execution	(2) Requirements elicitation, analysis and prioritization	60	ISA	Q3/2012	Q3/2012

Phase: Inception Execution Operational	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	(3) Extension and/or instantiation of the ADMS	40		Q3/2012	Q3/2012
Execution	(4) Join. Up repository extension and test.	50		Q4/2012	Q4/2012
Execution	(5) Federation of IOP assets from pilot MSs	50		Q1/2013	Q1/2013
Execution	(6) Adjustment of the platform to new/changed requirements	50		Q1/2013	Q1/2013
Operational	(7) Final release and operation of the EFIR.	20		Q2/2013	Q2/2013
Operational	(8) Collection and processing of assets	80		Q2/2013	Q4/2013
	Total	440			

4.2.4.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2012	Inception	90	
2012	Execution	150	
2013	Execution	100	
2013	Operational	100	
2014			
2015			

4.2.4.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

4.2.5 SHARING AND REUSE STRATEGY

4.2.5.1 Context

4.2.5.1.1 Identification of the action

Type of Action	Study
Type of Activity	Common Frameworks
Service in charge	DIGIT/B2
Associated Services	All concerned Commission Services

4.2.5.2 OBJECTIVES

The aim of the action is to develop a holistic approach to sharing and reuse across border and sectors with a view to helping public administrations all over Europe to share and reuse solutions related to public services delivery in an efficient and effective way. A common strategy is to be defined together with the governance, the processes and the instruments to optimise the potential of sharing and reuse activities and increase the savings they can bring to public administrations.

4.2.5.3 SCOPE

The exact scope of the action will be defined during the course of the action itself but sharing and reuse can be applied to public service solutions like legal frameworks, ideas, approaches, processes, methods, specifications, tools, components Several ISA initiatives in the area of sharing and reuse relating to first and foremost open source software, semantic assets as well as assessments of standards and specification will be imbedded in the overall approach. Different reusable artefacts can be identified per interoperability layer as these are defined in EIF.

4.2.5.4 PROBLEM/OPPORTUNITY STATEMENT

Europe – or for that matter – the whole world experiences an economic crisis.

This crisis will require public administration to do the same or even more with much less. It is in that context that sharing and reuse has the potential to bring much needed savings.

Sharing and reuse can really bring savings and benefits if they are organised upfront of any development of new solutions for public service delivery.

At the same time reuse of solutions is likely to make it easier for public administrations to interact and will consequently indirectly enhance interoperability efforts undertaken under other initiatives and actions.

Member States and the Commission have already taken various steps towards this direction, but unless Member States and the Commission act together at EU level, sharing and reuse will not optimise the potential savings and indirectly facilitate interoperability across borders and sectors.

4.2.5.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
EU public administrations	Savings as well as indirect facilitation of interoperability through the reuse of existing public services solutions all over Europe

4.2.5.6 Related EU actions / policies

Action / Policy	Description of relation

4.2.5.7 ORGANISATIONAL APPROACH

4.2.5.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States' public administrations	ISA Working Group experts
The European Commission	DG Informatics as well as ICT services of other directorate generals

4.2.5.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?

Event	Representatives	Frequency of meetings / absolute dates of meetings?

4.2.5.7.3 Governance approach

The Member States and the Commission should first agree on a common approach to sharing and reuse and, in close collaboration, define a strategy in function of which the sharing and reuse governance will be defined as part of the action.

4.2.5.8 TECHNICAL APPROACH

The action will define a strategy addressing first and foremost the following issues:

- Which kinds of solutions can be shared?
- How reuse and sharing should be organized at an EU level?
- How other ISA Actions could contribute and be linked to sharing and reuse practices
- What are the main barriers to sharing and reusing?
- How to better develop reusable solutions?
- How to leverage existing national initiatives?
- How to select reusable solutions at EU level?
- How to market reusable solutions to public administrations?
- How do you ensure reuse at all government levels?

4.2.5.9 COSTS AND MILESTONES

4.2.5.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Study		150	ISA	Q2/2012	Q4/2012
	Total	150			

4.2.5.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		0	
2011		0	
2012		150	
2013		0	
2014		0	
2015		0	

4.2.5.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

5. PROGRAMME MANAGEMENT

5.1 MONITORING AND EVALUATION

5.1.1 Context

5.1.1.1 Identification of the action

Type of Action	Accompanying measures
Type of Activity	Monitoring and Evaluation (art. 13 of ISA Decision)
Service in charge	DG DIGIT
Associated Services	

5.1.2 OBJECTIVES

The objective of the action is the measurement and evaluation of the ISA work-programme, which will contribute to its effectiveness (i.e. meeting the objectives of the ISA Decision and the EIS) as well as to its efficiency (i.e. improving the internal management processes of the ISA work-programme).

Art. 13 of the ISA decision requires the monitoring and evaluation of the progress and in particular the relevance, effectiveness, efficiency, utility, sustainability and coherence of the actions of the programme. Besides, the Commission proposal for the ISA decision included a number of high-level indicators, as well as the draft versions of the EIS.

5.1.3 SCOPE

The European Interoperability Strategy's vision states that in 2015, interoperability has significantly fostered European Public Services delivery through, among other things, "the establishment of appropriate governance organisation and processes in line with European Union policies and objectives". This requires that a suitable governance structure is put in place, and it is supported by the necessary processes and these are also followed – with clear interfaces with the Member States' respective organisations and processes.

It is within this context that the EIS defines the Interoperability Governance Pyramid. Thus, the EIS requires the establishment of an adequate Governance structure that is supported by this monitoring and evaluation action to achieve the EIS vision.

5.1.4 PROBLEM/OPPORTUNITY STATEMENT

The lack of continuous measurement severely limits the ability to achieve the intended results or even to identify if they were achieved. Therefore a system needs to be set up that is able to provide both quantitative and qualitative metrics, thus providing guidance on both ISA and EIS objectives. The supporting system will also act as an effective communication tool for decision-making.

5.1.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Commission	Ensure the objectives of the ISA Decision are met
	Cost reduction, as underperforming actions will be identified sooner
	Improve management process of the ISA program
	Increase transparency of the ISA work-programme investments
	Better decision-making tool
ISA Committee	Better communication of the results of individual actions
	Improved information of the overall ISA work-programme

5.1.6 Related EU actions / policies

Action / Policy	Description of relation
EIS	EIS Governance structure
ISA Actions	Helps to steer course of ISA work programme

5.1.7 ORGANISATIONAL APPROACH

5.1.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
ISA Actions	Action owners
Member States	ISA Committee members

5.1.7.2 Communication plan

Event	Representatives	Frequency of meetings / Absolute dates of meetings?
ISA Governance Meetings	ISA Coordination Members	Twice a year

5.1.7.3 Governance approach

- 1) Establish the measurement and related management processes;
- 2) Implement the above mentioned processes in the adequate set of tools (including project and portfolio management and customer relationship management software);
- 3) Execution of the measurement programme (monthly, quarterly, semester and yearly).

In each period the relevant metrics will be gathered, grouped, analyzed and distributed to all stakeholders (including EU citizens when privacy and business secrecy concerns are met). The metrics will be grouped in 3 categories: a) process metrics (e.g. cost, risk, time), content-generic metrics (that will be the same for each type of action as defined in art. 3 of the ISA Decision, including policy impact metrics) and content-specific metrics (that will be different for each action).

These tasks will be completed by the project managers of the different actions of the ISA work-programme and DIGIT with the aid of external contractors.

5.1.8 TECHNICAL APPROACH

The implementation will be based on commercial, off the shelf applications:

- The business needs will be implemented by management processes supported in a new Portfolio and project Management System (PPMS). The PPMS will help in decision-making, act as the common repository of all the actions of the ISA programme and provide a reporting tool for the different stakeholders (CIOs, DIGIT hierarchy, Programme managers, etc.).
- Other systems may be included for Customer Relationship Management and tracking web use.

5.1.9 COSTS AND MILESTONES

5.1.9.1 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/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Phase 1	Design and implementation of the measurement process	200	ISA	Q3/2010	Q4/2011
Phase 2	2010 WP monitoring	250	ISA	Q3/2010	Q1/2011
	2011 WP monitoring	550	ISA	Q2/2011	Q1/2012
	2012 WP monitoring	550	ISA	Q1/2012	Q1/2013
	2013 WP monitoring	550	ISA	Q1/2013	Q1/2014
	2014 WP monitoring	550	ISA	Q1/2014	Q1/2015
	2015 WP monitoring	550	ISA	Q1/2015	Q4/2015
	Total	3.200			

5.1.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	Phase 1	350	348
2011	Phase 1 Phase 2	650	
2012	Phase 2	550	
2013	Phase 2	550	
2014	Phase 2	550	
2015	Phase 2	550	

5.1.10 ANNEX AND REFERENCES

Description	Reference link	Attached document

5.2 EIS GOVERNANCE SUPPORT

5.2.1 Context

5.2.1.1 Identification of the action

Type of Action	Accompanying Measures
Type of Activity	Governance
Service in charge	DG DIGIT/B2
Associated Services	All Commission Services

5.2.2 OBJECTIVES

As stated in the ISA Decision:

"The Member States and the Commission should increase their efforts to avoid market fragmentation, achieve interoperability and promote commonly agreed ICT solutions, while ensuring the appropriate governance."

"The ISA programme should be based on the experience gained from the IDA and IDABC programmes. The conclusions drawn from the evaluations of the IDABC programme, which address the relevance, efficiency, effectiveness, utility and coherence of that programme, should also be taken into account."

The objectives of this action are to help ensuring regular maintenance and evolution of the strategy so that:

- the EIS stays aligned with the EU political agenda and with the priorities and initiatives of the Member States regarding European Public Services and interoperability activities;
- ongoing EU and national interoperability activities bring the expected value to the EIS interoperability vision.

5.2.3 SCOPE

This action will help instituting EIS governance and the related decision making processes and activities for implementing, monitoring and keeping up to date the European Interoperability Strategy (EIS).

The core organisational tasks of this EIS Governance action encompass the whole implementation of the EIS as well as ensuring the alignment of the long term vision with short term actions and their related objectives.

The action will have a permanent activity on screening which changes at EU and Member State level might have an impact on the EIS implementation and on the EIS itself.

In 2012, the EIS will be revised. This revision will probably have an impact on the ISA Work Programme and on other EU initiatives and may lead to an update of the European Interoperability Framework.

5.2.4 PROBLEM/OPPORTUNITY STATEMENT

As stated in the EIF :

" Due to their cross border and in some cases cross-sectoral characteristics, European Public Services are operated in a complex and changing environment.

Ensuring interoperability between legal instruments, organisation business processes, information exchanges, services and components that support the delivery a European Public Service is a continuous task as interoperability will be disrupted by changes to the environment, i.e. changes to the legislation, business or citizens needs, public administrations organisation, business processes or technologies.

Even if interoperability is maintained for a given European public service, its delivery often relies on components that are common to many European public services. These components, which are the results of interoperability agreements reached outside the scope of the European public service, should also be made available over time.

Moreover, as the common components and interoperability agreements are the results of work carried out by public administrations at different levels (local, regional, national, EU), coordination and monitoring this work requires a holistic approach."

This holistic approach will be ensured by EIS governance activities along the whole ISA programme life.

The EIS governance support action will help the EIS Project officer in this area.

5.2.5 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	Strategic alignment between interoperability activities and Member States related priorities, coherence of interoperability actions at EU and MS levels. Awareness on and understanding of EU interoperability related activities.
European Commission	Strategic alignment between interoperability activities and EU policies, coherence of interoperability actions within the Commission.

5.2.6 Related EU actions / policies

Action / Policy	Description of relation
Digital Agenda	The digital agenda promote interoperability through the adoption of the European Interoperability Strategy.
eGovernment Action Plan	The eGov action plan refers to the implementation of the EIS via the ISA programme during the period of 2011-2015.

5.2.7 ORGANISATIONAL APPROACH

5.2.7.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States' public administrations	The ISA committee and the eGov high level group through the EIS steering group.
Commission Services	A representative from each concerned Commission service.
ICT Industry	Representatives of ICT industry, SMEs, ...
Standardisation bodies	Representatives from standardisation organisation for a and consortia.
Local and regional public administrations	Representatives from local and regional public administration European representative organisations such as Council of European Municipalities and Regions, Eurocities, ...

5.2.7.2 Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
EIS steering committee	Member States, Commission	At least once a year.
EIS workshop	Member States, Commission	At least twice a year.
EIS info day	External stakeholders	At least every 2 years.
Conference	Public	When relevant.

5.2.7.3 Governance approach

The action will be run by DIGIT with the support of a contractor.

In order to allow the EIS steering group to take decisions, all needed information should continuously gathered and analysed. Once a year (or punctually if necessary) some proposals should be put forward to the EIS steering group regarding strategic directions to be reinforced, given up or new ones to be adopted. Then decisions should be communicated to the relevant stakeholders, the impact on the ISA work Programme and if necessary on other EU initiatives should be analysed and adequate changes to the work programme should be made, implemented and monitored.

5.2.8 TECHNICAL APPROACH

Consequently, the EIS governance support action will include activities on yearly basis aiming at:

- ensuring collection, analysis of new EU policies, Member State priorities and initiatives that can have an impact on the overall EIS as well as associated risks and opportunities;
- ensuring the well functioning of the portfolio management activities including the analysis of project status and value measurement;
- conducting a yearly analysis on the possible consequences of new EU policies and Member State priorities and of the Project Portfolio Management status regarding the EIS;
- issuing a yearly report proposing decisions to be taken on EIS strategic directions and the related impact on the ISA Work Programme, the European Interoperability Framework and on other EU initiatives if relevant.

Besides EIS governance activities, the evaluation of the level of performance in implementing the EIS will be performed through two complementary methods proposed as specific action of the ISA Work Programme.

The first one, on top of the EIS governance pyramid, is a Maturity Model. It seeks to provide a self-assessment tool for administrations to evaluate their level of maturity in the field of interoperability. At the bottom of the EIS governance pyramid, the overall performance of specific projects falling under the different clusters can be assessed by means of metrics such as Key Performance Indicators. These indicators reflect the performances of clustered projects in terms of value, risk and progress performances.

5.2.9 COSTS AND MILESTONES

5.2.9.1 Breakdown of anticipated costs and related milestones

Phase:	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception					
Execution					

Operational					
		1.200	ISA	Q3/2010	Q4/2015
	Total	1.200			

5.2.9.2 Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010		200	205
2011		200	
2012		200	
2013		200	
2014		200	
2015		200	

5.2.10 ANNEX AND REFERENCES

Description	Reference link	Attached document
The European Interoperability Strategy	http://ec.europa.eu/isa/documents/isa_annex_i_eis_en.pdf	

6. LIST OF ABBREVIATIONS AND ACRONYMS

- Ares - tool under the e-Domec policy for the registration and filing of documents;
- BB - Building block. Software component, and technical specifications, that can be combined with other building blocks to facilitate cross-border and cross-sector information exchange .;
- BUSDOX - Business Document Exchange Network;
- CEN/ISSS WS/BII - CEN/ISSS workshop on 'Business Interoperability Interfaces on public procurement in Europe';
- CII - Cross Industry Invoice;
- CIP - Competitiveness and Innovation Programme;
- CIPA - Common Infrastructure for Public Administrations. The combination of infrastructural building blocks to enable activities between public administrations across borders and in different sectors;
- CIRCABC - Communication and Information Resource Centre for Administrations, Businesses and Citizens;
- e-CODEX - e-Justice Communication via Online Data Exchange PEPOL is a LSP which aims to enable interoperability between legal authorities within the EU;
- EDI - Electronic Data Interchange;
- e-Domec - policy for Electronic archiving and Document Management in the European Commission;
- e-Delivery - Electronic Delivery Secure messaging service of CIPA: cross-border services that provide public administrations with secure and interoperable means of exchanging information with other administrations. The main features of e-Delivery are:
 - 1. Common messaging services;
 - 2. Dynamic discovery and addressing of entities (Service Metadata Publisher/Service Metadata Locator – based on DNS);
 - 3. Standard gateway to national/ regional/ local/ organisational domains;
 - 4. Security:
 - Trusted exchange (PKI)
 - Non Repudiation (evidences)
 - Authenticity of origin
 - Integrity of content
- eFP7 - Participant portal for the research community in Europe as single entry point of interaction with the Research DGs; is used to manage projects and funds under the FP7 programme;
- EFTA - The European Free Trade Association;
- EIF - European Interoperability Framework;
- EIIS - European Interoperability Infrastructure Services - study on potential re-use of service modules and components;
- EIS - European Interoperability Strategy;
- e-PRIOR - electronic PRocurement, Invoicing and ORdering
- FP7 - Seventh Framework Programme - current EU programme for research;
- HERMES - Name of the Central document management system at the Commission;

- HRS - HERMES Repository Services – web services to connect to HERMES;
- IBB - Infrastructural building block – basic building blocks with the potential to be re-used in any Pan-European project to enable the delivery of cross-border services;
- IDABC - Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens;
- ITIL - Information Technology Infrastructure Library - best practices for IT Service Management;
- LSP - Large Scale Pilot (also known as Type A) Pilots aiming to demonstrate a “federated” solution and borderless operation of national systems in at least 6 Member States but with the potential to scale up to all Member States;
- MoReq2 - Model Requirements Specification for the Management of Electronic Records, version 2;
- NomCom - tool under the e-Domec policy for managing filing plans and file lists;
- OSOR - The Open Source Observatory and Repository for European public administrations (www.osor.eu);
- PEPPOL - Pan-European Public Procurement Online PEPPOL is a LSP which aims to enable cross-border eProcurement, connecting communities through standards-based solutions;
- PKI - Public Key Infrastructure;
- RUP@EC - Rational Unified Process, customized for the EC - methodology for software development;
- SEMIC – Semantic Interoperability Centre (www.semic.eu);
- SEPA - Single Euro Payments Area;
- SFC2007 - System for Fund Management in the European Community 2007 – 2013;
- SME - Small and Medium Enterprise;
- STORK - Secure Identity Across Borders Linked STORK is a LSP which aims to establish a European eID Interoperability Platform;
- SPOCS - Simple Procedures Online for Cross- Border Services SPOCS is a LSP which aims to build the next generation of online portals, which every European country now has in place, through the availability of high impact cross- border electronic procedures.
epSOS Smart Open Services for European Patients epSOS is a LSP which aims to enable cross-border e-Health;
- UN/CEFACT - United Nations Centre for Trade Facilitation and Electronic Business;
- XML - eXtensible Markup Language.