ISA Work Programme

First revision 2011

Annex to Section I

Part 1

Detailed description of actions

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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. Methodologies for the development of semantic assets

1.1.1. CONTEXT

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 provide practical methodologies to European public administrations and support their collaboration to achieve trusted information exchange. The methodologies will assist public administrations in the development of assets, their sharing and re-use.

This action also aims to co-ordinate the work done by the European public administrations on semantic interoperability through support for collaboration activities and to increase the awareness of its importance.

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.

Provided by the current SEMIC.eu which makes available the necessary support infrastructure for the sharing and re-use of semantic assets and bringing administrations together to collaborate and develop semantic assets together. The action goes beyond the provision of the current online services. However the technical development of the platform and the generic animation activities are not considered within the action, as these will be covered via other activities (namely the "ISA Integrated Collaboration Platform" and the "Community building and effective use of the collaborative platforms" actions) in the work programme.

1.1.4. PROBLEM / OPPORTUNITY STATEMENT

The environment in which data exchange takes place is very complex and influenced by the numerous factors including divergent interpretations of the data, the multilingual environment and also the specifics within the Member States caused by legislation and regulation. Ensuring proper collaboration between the EU public administrations, so as to develop common methodologies and semantic assets together, may prove to be key to address the challenges of semantic interoperability.

Through this action, the ISA programme sets to achieve a better collaboration between European public administrations towards the agreement on the meaning of the information to be exchanged.

1.1.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	This action will develop an environment for the exchange of information between MS public administrations to fulfil legal requirements or other political commitments with the aim to improve public services. This action will also provide common methodologies guiding public administrations to develop semantic assets whilst addressing the barriers for asset re-use.
IT Services Industry	This action will bring closer various communities, bodies and organisations working on semantic interoperability with the main objective to support public administrations in co-ordination activities, promotion of the reuse of semantic assets and methodologies.
European Commission Services	This action will support the development of a common approach towards semantic interoperability and thus addresses similar challenges faced by different DGs and Commission services.

1.1.6. ORGANISATIONAL AND TECHNICAL APPROACH

This action will be composed of two parallel phases. The first one, whish will be the operational phase, will continue to build on the current SEMIC.eu services and thus will provide information both about semantic interoperability and the state of play of Member States in the field and provide guidance to public administration both on development of common methodologies and development of semantic assets. The clearing process will remain an integral part of the quality assurance process and will continue to provide support for the harmonisation process of similar assets.

The second phase will focus more on the development of methodologies themselves. This will start with a revision of the SEMIC.eu roadmap so as to highlight the new actions to be undertaken and focus areas together with the revision of the operational documents of the SEMIC.eu platform.

This action will take a more proactive approach to the identification, possible re-use and sharing semantic assets and existing and potential collaboration activities which foster data exchange between European public administrations. An important part of this action will be the production of Recommended Specifications for Semantic Assets.

Practical support and coaching to public administrations will remain to be a key focus on assisting public administrations to collaborate to develop cross-border and cross sector semantic assets.

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. This will be the main group for this action, however other activities that may support the achievement of the above mentioned objectives fall under other working groups namely the Exchange of best practice. There will also be a strong link between this action and the projects under the Trusted Information Exchange area.

1.1.7. COSTS AND MILESTONES

1.1.7.1.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)
Operation	Provision of the online services via the SEMIC.eu platform including the clearing process, coaching and support activities, collaboration activities as well as all relevant news.	800	ISA	Q3/2010	Q3/2011
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 and Publishing of methodologies, Collaboration activities for cross border asset development, support and	5850	ISA	Q2/2011	Q4/2015

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)
	promote collaborative asset development, and showcasing real semantic interoperability examples. Maintenance of the online services via the SEMIC.eu platform including the clearing process, coaching and support activities, collaboration activities as well as all relevant news.				
	Total	7050			

1.1.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	550	550
2011	1.000	
2012	1.000	
2013	1.500	
2014	1.500	
2015	1.500	

1.2. Access to base registries

1.2.1. CONTEXT

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

1.2.2. 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; …"

- 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. 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.

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.

1.2.7. COSTS AND MILESTONES

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)
Study	framework on access to authentic data sources	300	ISA	Q3/2010	Q2/2011
Study	proposal for next steps	250	ISA	Q3/2011	Q2/2012
	Total	550			

1.2.7.2.Breakdown of ISA funding per budget year

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

1.3. Catalogue of services

1.3.1. CONTEXT

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, 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. ORGANISATIONAL AND TECHNICAL 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. COSTS AND MILESTONES

1.3.7.1.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	feasibility study	200	ISA	Q3/2010	Q4/2010
Study	proposal for next steps	250	ISA	Q3/2011	Q2/2012
	Total	450			

1.3.7.2.Breakdown of ISA funding per budget year

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

1.4. ECAS-STORK Integration

1.4.1. CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG DIGIT
Associated Services	DG INFSO, DG MARKT, DG JLS, DG ENV

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.

It requires:

1. Deploying production quality code that integrates with the ECAS production instance so that the information systems that rely on ECAS for performing the authentication can benefit from the ECAS-STORK integration.
2. Implementing a solution that fulfils the needs of the information systems, which requires a full coverage of their target population including support for users who are not eligible to use STORK (i.e. a partial coverage is not better than no coverage at all). Moreover, the sustainability of STORK beyond Q2 2011 is still uncertain. Any solution used by production information systems must therefore include a fallback mechanism that can be used in case STORK comes to an end.
3. Capitalising on the implementation performed at the European Commission to expand it to other European Union institutions and bodies.

1.4.3. SCOPE

1. Participation to the STORK pilot

The proof of concept demonstrating the integration of ECAS with STORK was funded by IDABC. Moving to production quality services requires additional development efforts on one hand and maintenance and operation efforts on the other hand, including the integration of bug fixes, service packs and newer versions of the STORK deliverables.

2. Consolidation

Most information system owners have an interest in using STORK because of the improved security. Applications, such as IMI from DG MARKT, already contain proprietary components implementing authentication mechanisms that are stronger than a login name and a password. For these applications, the effort of migrating to STORK is only beneficial if their entire user population is covered and if they can completely drop their proprietary components. STORK, especially in its infancy, only covers a limited subset of the user population of most European Commission information systems. Developing alternate mechanisms to support the users who are not eligible to use STORK is therefore essential. Moreover, these mechanisms can be used as a fallback approach in case STORK terminates, hence protecting production information systems from such a risk.

3. Expansion

Reusing the experience built at the European Commission in other European Union institutions and bodies could be achieved in multiple ways ranging from technology reuse (i.e. expanding the code of the European Commission PEPS, the Pan European Proxy Service which acts as a kind of STORK gateway, so that it can be reused) to service integration (i.e. sharing services) and interoperability (i.e. allowing partner organisations to connect to the European Commission PEPS or to federate with STORK through ECAS). These options need to be explored and assessed.

1.4.4. PROBLEM/OPPORTUNITY STATEMENT

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. There is an opportunity to capitalise on the development performed within that scope in order to offer production quality services that have direct value for the citizens. This requires building an offering that answers all the needs of the applications interested in such integration.

ECAS will be used for the European e-Justice Portal, in 22 languages, and there are strong links to e-ID/STORK where e-ID and STORK solutions and components will be implemented for the Portal once they are available. Testing of STORK solutions in ECAS in 2010 is of great interest to e-Justice in that respect. DG MARKT, within the scope of the IMI project, and DG ENV, within the scope of the CITL (Kyoto) project, have emphasised their strong interest in the ECAS/STORK integration.

In addition, other European Union institutions and bodies could benefit from the effort carried out by the European Commission.

1.4.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Institutions and Agencies	- The European Commission demonstrates that it promotes the usage of European initiatives such as STORK. - All ECAS-enabled information systems (i.e. more than 250

European Commission Services	applications) benefit from the integration with STORK 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 electronic identity card is "cooler" than doing so with a login name and password. It improves the image and gives a touch of modernity.
Member States' Public Administrations	- 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. This is particularly important for an information system such as IMI where critical information is exchanged. The users who have a national authentication mean have indicated that they want to use one that is at least as secure in order to connect to IMI.

1.4.6. ORGANISATIONAL AND TECHNICAL APPROACH

The whole effort will be carried out by DIGIT.A.3.

The work is split into 3 packages:

1. Participation to the STORK pilot

- Project: proof of concept
- Project: from pilot to production

2. Consolidation

- Project: bundled offering

3. Expansion

- Study: other institutions and bodies

1.4.7. COSTS AND MILESTONES

1.4.7.1.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)
Execution	Proof of concept (Execution report)	420	IDABC	Q3/2009	Q2/2010
Inception	Participation to the STORK pilot (project charter)	60	ISA	Q3/2010	Q4/2010
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
	Total	1.580			

1.4.7.2.Breakdown of ISA funding per budget year

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

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	DIGIT

1.5.2. OBJECTIVES

The STORK Large Scale Pilot is a 36 month long project under CIP ICT PSP. It stated June 1st 2008 and has its 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 form 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 that 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	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 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 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

Beneficiaries	Anticipated benefits
Private Sector (inc. SMEs)	The private sector will get access to an open suit of eID specifications. This will be particularly important for European SMEs. 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.

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. INFSO 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 changed 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	360	ISA	Q2/2011	Q2/2013
Execution	Evaluation	60	ISA	Q4/2012	Q2/2013
	Total (ISA)	910	ISA		

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	420	
2013		
2014		
2015		

1.5.8. Annex: references

The study should be done in discussion with STORK consortium and building on results from it, to avoid potential duplication and also to maximise on targeted area of work which is not addressed by STORK. http://www.eid-stork.eu

1.6. 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

1.6.2. OBJECTIVES

The main objective of this project is to plan the transition of PEPPOL to operation and its sustainment during the migration period. A well defined transition and migration plan should be outlined with enough time in advance to ensure that the hand-off of the PEPPOL infrastructure to the operations entity will be as smooth as possible. In particular, this project aims to:

- Ensure clear linkage between the transition of the PEPPOL infrastructure into operation and the key strategic business priorities in the e-Procurement domain.
- Investigate the future business model of PEPPOL sustainability in the short and long term.
- Define the future vision. PEPPOL is entering a critical stage of its existence. In this context, a clear vision of its future is required for Public Administrations to embrace it and commit to its use in their future Procurement activities. The definition of the way going forward is required before the project ends so that the transition to its afterlife is smooth and does not harm what has been achieved already.

- Assess the feasibility of a take over of the PEPPOL infrastructure by DIGIT once the pilot project ends.

- Develop recommendations and next steps for addressing concerns of the several participants in the production pilots of PEPPOL and potential current gaps with the business strategy.

- Ease the migration of PEPPOL's infrastructure into operation according to a predefined target operating model aligned to the business vision.

This project is complementary to the PEPPOL Sustainability and Governance model which will be delivered by the PEPPOL project. In broad terms, the PEPPOL governance model will be set up on top of the (daily) IT services and infrastructure management processes. The making of the future governance model is not an objective of this project since this is a deliverable of the PEPPOL project.

1.6.3. SCOPE

This is a multidimensional project where strategy, business and technical viewpoints will be linked-up to define the transition roadmap of the PEPPOL infrastructure into operation. This project will not look into PEPPOL in isolation. Instead, it will look beyond it taking into account the key strategic e-Procurement priorities which are currently being outlined by DG MARKT in their Green Paper and White paper initiative. The first deliverables of this project will be the Business Gap Analysis, which includes the pilots lessons learned, and the Take-Over Feasibility Study of the PEPPOL infrastructure. Based on the information gathered during the gap analysis and take-over feasibility step, and according to the third objective of this project, a Transition Roadmap will be outlined. Finally, this project will execute the migration plan by migrating into operation the elements of the PEPPOL infrastructure according to the timeline defined in the transition roadmap.

1.6.4. PROBLEM/OPPORTUNITY STATEMENT

Even if the planned milestones addressing the PEPPOL common solution have been mainly achieved, for the take-up of cross border e-Procurement, the sustainability of this eco-system will need to be tackled in a more comprehensive and “business-oriented” manner, beyond the purely technical matters. As in any major IT development, it is clear that the technical success of the PEPPOL solution will not be enough to ensure the delivery of the expected business benefits. As a response, this action will look into the technical and business aspects of PEPPOL's sustainability to ensure that the transition between the piloting mode and production mode is carried out according to a clear vision and following a holistic roadmap. Therefore, transitioning PEPPOL to production is today a key challenge for the enablement of cross-border e-Procurement in Europe.

Whilst the PEPPOL project may be a success within itself, once the test and production pilots are completed and demonstrate that the network is reliable, the afterlife benefits may never be realised without a sustainable transition to operation and its widespread adoption by European Public Administrations. This risk is even more marked when the very essence of a high potential and innovative project like PEPPOL is that, by definition, its impact and overall business effects, intended or unintended, are hard to control and measure.

This project will pave the way towards the transition of PEPPOL to operation taking as input a holistic view of e-Procurement framed on benefits realisation (e.g. cross-border e-Procurement enabled by a high number of Public Administrations interconnected to PEPPOL). The transition roadmap will be supplemented by a proactive monitoring process which will feed into the existing monitoring and evaluation process of the PEPPOL project. A reactive approach could

jeopardise the resources already invested in the PEPPOL project and standardisation activities like the CEN/BII workshop by the European Commission and Member-States.

The operation of the PEPPOL infrastructure and related services is conditional on the setup, operation and technical support of the centralised services. If this is not done, the PEPPOL community will have difficulties to continue after the end of the current project and the test piloting phase. Furthermore, the coordination between the PEPPOL transition to operation and the Green and White paper (for e-Procurement) initiative of DG MARKT is very pertinent and relevant for exploiting the potential advantages of the widespread use of ICT in public procurement.

1.6.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations	EU public offices will be able to implement interoperable cross-border e-procurement operations
Software industry and IT service markets	Clear reference specifications will be available to industry and services market to define their own strategies
European Commission services	The project will reinforce actions to achieve wide e-procurement availability for cross-border procurement

1.6.6. ORGANISATIONAL AND TECHNICAL APPROACH

The first step of this project will be to perform a Business Gap Analysis, including the Lessons Learned of the production pilots of PEPPOL, and a Take-Over Feasibility Study. Any possible implementation issues will therefore be identified before the PEPPOL project ends. 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 the transition period is used to enable the long term exploitation of PEPPOL by European public administrations and economic operators.

This project will be run in close cooperation with the Monitoring and Evaluation process of the PEPPOL project and the production pilots which start in November 2010. A number of other DGs (DG MARKT, DG INFSO and DG ENTR) will also be involved in the transition process since the PEPPOL sustainability effort will be an all embracing effort which must be aligned with the business vision of e-Procurement in Europe.

The results of the governance model exercise, currently being carried-out by the PEPPOL project, will be taken onboard as a fundamental input of this project as well as the Green paper and White Paper on e-Procurement to be performed by DG MARKT.

Service management methodologies such as ITIL will be used for the production of the Take-Over Feasibility Study. Benefits management (VAST), Change management (PM2) and

Enterprise Architecture (CEAF) methodologies and frameworks will be used in the production of the Business Gap Analysis.

Inception Phase

Work-Package: Take-over Feasibility Study

This study will establish a realistic understanding of:

- The Commission's capability to host and operate the central components of PEPPOL. This involves identifying these components and understanding the requirements for migrating them to operation in a scenario where the PEPPOL community, translated by the number of PEPPOL gateways and end-users, will most likely be growing (e.g. scalability, availability, reliability of these components).

- The Commission's capability to provide the services related to the daily operation of PEPPOL's central components, support to PEPPOL's Gateways, end-User support and the on-boarding of new PEPPOL Gateways. This will also involve 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, the specifications of PEPPOL will most likely evolve and the linkages between this domain and the operational service model (e.g. change management) will also require analysis to ensure the smooth evolution of the overall PEPPOL ecosystem.

Cost considerations will be addressed for both of these dimensions.

Execution phase

Work-Package: Business Gap Analysis

In addition to the take-over feasibility study described above, this project will analyse the business value of the several central components and tools which are to be migrated to operation. This track will look beyond the technical elements and focus on the alignment of PEPPOL to the business vision as well as change and benefits management. If not considered any of these elements may, at some point, stand in the way of the widespread use of PEPPOL 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 in the GAP analysis and Feasibility Study will be consolidated and used in the creation of a holistic transition roadmap. At this stage, particular attention will be given to the alignment between PEPPOL's transition roadmap and the White Paper/road-map on e-procurement by DG-MARKT.

Work-Package: Detailed Design of Target Operating Model

This step will aim at detailing the operational IT services (including support to the implementation of PEPPOL Gateways and end-User support) 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.

Operational Phase

Hand-Over and Take-Over of the PEPPOL infrastructure and tools

1.6.7. COSTS AND MILESTONES

1.6.7.1. 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 + Feasibility Study	200,00	ISA	Q3/2010	Q2/2011
Execution	Business GAP Analysis (including Pilots Lesson Learned)	100,00	ISA	Q1/2011	Q3/2011
Execution	Transition Roadmap	100,00	ISA	Q2/2011	Q3/2011
Execution	Target Operating Model and Migration Pan	200,00	ISA	Q3/2011	Q4/2012
Execution	Execution Report (internal resources)	00,00	ISA	Q4/2011	Q1/2012
Operational	Operation 2012 (est.)*	420,00	ISA	Q2/2012	Q1/2013
Operational	Operation 2013 (est.)*	462,00	ISA	Q2/2013	Q1/2014
Operational	Operation 2014 (est.)*	508,00	ISA	Q2/2014	Q1/2015
Operational	Operation 2015 (est.)*	560,00	ISA	Q2/2015	Q4/2015
	Total	2.550,00			

* **Disclaimer**: The operational amounts shown above are initial estimations received from the PEPPOL project which may change following the Feasibility Study and Business Gap Analysis to be performed in the context of this project.

1.6.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	200	200
2011	400	
2012	420	
2013	462	
2014	508	
2015	560	

1.7. e-PRIOR

1.7.1. CONTEXT

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 exchange[1] 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.

EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations - implementers of Public Services	▪ 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 document exchange. e-PRIOR could be used to facilitate e.g. the legislative

[1] See action 1.8 Trusted Exchange Platform

	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.

1.7.5. ORGANISATIONAL AND 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.

1.7.6. COSTS AND MILESTONES

1.7.6.1. Breakdown of anticipated costs and related milestones

Phase:	Description of milestones reached or to be	Anticipated allocations	Budget line ISA/ others	Start date	End date

	reached	(KEUR)	(specify)	(QX/YYYY)	(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	tbd
Execution	Phase 2b - Execution report (Pre awarding)	1.850	ISA	Q3/2011	Q4/2013
Operational		600	ISA	Q1/2012	Q4/2013
	Total	7.200			

1.7.6.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	2.150	2.149
2011	1.850	
2012	1.600	
2013	1.600	
2014		
2015		

1.8. Trusted Exchange Platform (e-TrustExchange)

1.8.1. CONTEXT

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, DG EMPL H.4

1.8.2. OBJECTIVES

The goal of this project is to provide a Trusted Document Exchange Platform that re-uses the existing e-PRIOR infrastructure and to proof the cross-sector re-usability of e-PRIOR. The main objective is to provide a set of integrated re-usable components designed within a coherent architecture that implements a technical platform able to support and secure a number of business document workflows between European Commission and national parliaments, permanent delegations, local governments, businesses, citizens, other EU institutions.

This would improve - in terms of reliability, security, efficiency and capacity - the communication between European Commission and administrations, businesses and citizens.

The platform will guarantee equal treatment to all 3rd parties who need or want to exchange documents with the European Commission, and will replace, when needed and possible, notification by traditional means (via the post) with legally equivalent electronic interactions.

The action also aims at analysing the possibility to have a convergence with other initiatives which implement similar solutions for data transport and message exchange in specific policy sectors. This would allow to create synergies and to produce a future streamlined re-usable solution for Business Document/ Structured Data Exchange usable cross sectors.

1.8.3. SCOPE

This action addresses the domain of Government-to-Government (G2G), Government-to-Business (G2B) and Business-to-Government (B2G) and is related to the following priority areas of the ISA programme:

- Interoperability Architecture – Building blocks
- Trust and Privacy

The scope of the project is the development of a Trusted Document Exchange Platform based on e-PRIOR in the context of document exchanges in various domains (legislative, competition, internal market and employment, etc) via the implementation of pilots to demonstrate the cross-sector re-usability and security of e-PRIOR.

The main activities are:

1. Definition of the Architecture Vision of the Trusted Document Exchange Platform, including streamline of solutions for generic document exchange platform within the European Commission. This includes in particular the analysis of convergence with other initiatives provided by other Commission Services and Member States (see PEC project developed by France).
2. Customize and improve e-PRIOR in order to automate document workflows by exchanging XML metadata and any related attachments, such as legislative and non legislative acts in PDF, Word, etc in electronic format via a reliable and secure platform, with the respective counter parties. Envisaged recipients are permanent delegations, national parliaments, local governments, EU institutions, national competition authorities and large enterprises. This activity includes integration with back-office systems initially in the legislative and competition domains but then extended to other sectors (such as internal market and employment).
3. Configure Open e-PRIOR and make it available to the envisaged recipients as an open source client tool for exchanging documents and the related metadata. This includes a user interface to manage the exchange information and documents.
4. Gradually improve the support of standardized activities by defining meta-data specifications for identified set of exchange/activities in the envisaged domains.
5. Extension of the trust and security underlying the Trusted Document Exchange Platform toward a full implementation of end-to-end trust, respecting the basic principles of digital security (i.e. Confidentiality, Integrity, Availability, Authenticity and Non-repudiation).
6. Develop extensions allowing supporting the exchange of huge documents and "bundles" of documents.

In order to support the deployment of this Trusted Document Exchange Platform in Member States, EU Institutions or other beneficiaries, a helpdesk will be put in place and detailed documentation will be provided. This will include end-to-end support related to the document exchange specifications, including the security aspects, support for the integration into their back-office systems, explaining the supported standards etc.

The exchange of classified documents is out of the scope of this project.

1.8.4. PROBLEM/OPPORTUNITY STATEMENT

The needs in terms of reliable exchange of documents, which are present in various sectors and met with unsatisfactory e-mail based or ad-hoc solutions, offer the opportunity to develop and expand the Trusted Document Exchange Platform.

The development of the pilots described below will prove the usability of the Trusted Document Exchange Platform in the secured document exchange for competition, legislative sectors and others.

Instead of working on the solution of generic but abstract requirements, the approach consists in exploiting the opportunities offered by the implementation of concrete examples of use of the platform via the interoperability with 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.

Among the significant requirements to be supported in the document exchange we find the following:

- support of structured business documents (already implemented for e-Procurement, such as Invoices, Credit Notes, Orders, Offers etc);
- support of large not structured documents (e.g. replies to requests for information, sector inquiries or any correspondence containing large documents) between the Commission and 3rd parties (national, regional and local administrations, businesses, citizens, other EU institutions)
- support of sensitive information requiring secure handling (e.g. encryption)
- support of advanced non-repudiation features (receipt for delivered documents).
- support of bi-directional exchanges regulated by predefined conversational scenarios.
- support of broadcast / multi-recipients exchange..

As written above in many case the current solution is the use of normal emails, encrypted emails or even, because the limitations of the email, the solution simply consists in sending print-outs or CDs/DVDs by post.

The identified business cases offering the opportunity to test and extend the technical platform are described hereafter:

e-Greffe

E-Greffe is a workflow application which supports the decision making process of the European Commission. The e-Greffe application enables electronic management of all documents adopted

by the Commission. After adoption, e-Greffe forwards electronic copies of these legislative/legal documents (e.g. directives, regulations, decisions …) to all relevant EU Institutions (e.g. European Parliament, Consilium, BCE, OPOCE, …), as well as to the permanent delegations of the member states and to the national parliaments and local governments in the EU. These documents are in the form of PDF or Word documents, accompanied by metadata describing them (in an XML proprietary format). e-Greffe uses email to send these sets of documents to the national parliaments, since this technology is the most widely available and is easy to use. Some recipients have integrated the accompanying XML descriptor files with workflow tools on their side.

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 particular thanks to a new mechanism to monitor that the Union only acts where results can be better attained at EU level (subsidiarity principle). These exchanges represent today more than 50,000 e-mail messages a year and this traffic is expected to grow, when copies of the Commission decisions will be addressed to the permanent delegations and national parliaments.

EDMA - Exchange of Competition related documents.

Currently DG COMP systems exchange information and documents with national competition authorities of each EU member state, with enterprises, citizens and other entities. The documents are exchanged in electronic format via e-mail or by regular mail. Due to the security constraints the documents must be encrypted or electronically signed in some cases

The problem of email as transport protocol is that the size of attachments can have limitations so that the documents must be sent via multiple email messages. This overloads the Commission email server. There are no guarantees that the recipient has received the email(s) and the documents and the emails are not digitally signed. In these conditions the business processes cannot be integrated in a reliable and secure way and human intervention is required in almost all cases.

The exchange via encrypted email has also size constraints, overload of the Commission email server, does not fulfil equal treatment to all 3rd parties (since it can be used only by parties having PKI). Many outside entities wouldn't accept encrypted attachments as there is a need and a corporate policy to scan the e-mails against viruses.

In all these cases, interoperation with other IT services like document management (EDMA - Document Management System of DG COMP) or registry systems is not possible.

A.S.A.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 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.SA.P. in the pilots is the natural extension of the e-Greffe support.

The solution currently used by A.S.A.P. to receive advices from National Parliaments is the e-mail.

A.S.A.P. would benefit of the integration with the Trusted Document 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.

GENIS – State Aid Notification Services.

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). This action involves also Directorates General MARE and AGRI.

GENIS would benefit from the use of the e-PRIOR infrastructure for the document exchange to ensure trust and data privacy.

eQuestionnaire

eQuestionnaire is an application developed and used by DG COMP to carry out enquiries and investigations with companies, mainly in the policy areas of Mergers and Anti-Trust. It covers the full workflow of the enquiry/investigation, inclusive reporting. It handles confidential and non-confidential replies.

eQuestionnaire would benefit of the integration of the Trusted Document Exchange Platform by replacing the existing document transfer system the font office. The replacement would allow the secure transfer of structured data, larger files, and the support of groups of files.

The various back-end systems mentioned above would benefit from this integration by reusing e-PRIOR's experience in the G2G and G2B integration, reusing best practices and existing components. On the other hand they offer the opportunity to extend the features supported by the technical platform based on the E-PRIOR system to make it more generic by supporting significant functional and not functional requirements.

Since this integration is done with real systems solving real business needs, the results will also be the improvement of the quality of transmissions with member states delegations, national parliaments, local governments and EU institutions.

Additionally, this action will prove the re-usability of e-PRIOR in other sectors than e-Procurement.

Streamlining different solutions for trusted document exchange:

The EIIS (="European Interoperable Infrastructure Services") study had already identified e-PRIOR as a good candidate reusable component for Data Transport. The analysis of other similar solutions for a trusted document exchange platform would be the logical continuation of the abovementioned study and would be an opportunity to analyse the possible convergence between the initiatives for the cross-sector / cross-border document exchange.

The expected result is a consolidated Architectural Vision and this would allow streamlining the solution for exchanges between the European Commission, other EU Institutions, Member States administrations and all other types of parties currently involved in this type of interactions.

The candidate projects to be analysed and compared with e-PRIOR are EESSI (= Electronic Exchange of Social Security Information) by DG EMPL and PEC (Plateform d'echange de confiance) developed by the French "Direction Générale pour la Modernisation de l´État"

In Q1/2012 EESSI will reach the operational stage.

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).

The current infrastructure of EESSI (messaging and workflow) is already highly business agnostic and will anyway need to be reengineered to make it more reliable, efficient, ready for future traffic increase. It is also expected that with the experience of the first months of real usage in the Member States, new infrastructure requirements will be discovered.

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, traceability). There are plans and specifications available to extend this platform to become a generalised solution to implement dematerialised exchanges in the contest of administrative procedures by adding other features (e.g.: authentication, e-signature validation, receipt notification, encryption/decryption). The used technologies and standards should facilitate evolution and portability.

EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' public administrations and EU Institutions	Re-use of architectural aspects. In fact, the adoption of "Service Oriented Architecture" within which the various interactions between Commission systems (eg.: e-Greffe, ASAP, EDMA, State Aids management systems, e-Questionnaire), the e-PRIOR system and the "back office" of the public administration might be designed as invocation of services) Cost savings and improve efficiency, reduce time-to-market and ensure interoperability as handling legislative documents and follow up of legislative procedures can be automated (see business cases offered by e-Greffe and ASAP). Free-to-use open source tools for national parliaments and permanent representations to send and receive electronic legislative documents and metadata (see business cases offered by e-Greffe and ASAP). These tools can be used for exchanging other electronic business documents with other stakeholders (see business cases offered by DG COMP) Experience, lessons learnt, specifications, tools and components published as open source reusable by any Member State or EU Institution Replacement of notification by traditional means (via the regular mail) with legally equivalent electronic interactions, saving time, money and paper (green).
IT services in the Commission	The European Commission, because of its central 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.
EU Tax payer	Given the potential economies of scale realised if such a generic system can be put in place, the indirect benefits for the EU Tax payer are obvious

1.8.5. ORGANISATIONAL AND TECHNICAL 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.

In fact instead of working on the solution of generic requirements which would risk being abstract, the chosen approach consists in identifying the opportunities offered by the implementation of concrete examples of use of the platform via the interoperability with real working systems having significant functional and not functional requirements. This can actually 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.

For this reason 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, companies, citizens, NGO etc.)
- the coverage of additional sectors / policy areas.
- the "political" importance of the document exchange to support.

Phase 1

The inception phase of the action will cover the following:

1. Business requirements analysis and feasibility study.

   This phase will focus on establishing the business requirements for the legal decision making process and competition document management systems. The feasibility of the re-usability of e-PRIOR in this context will be assessed and the required additional developments will be analysed.

The execution phase of phase 1 will cover the following:

2. e-PRIOR system adaptations to support the legal and competition document workflows
3. Implementation of two pilot projects:
   - e-Greffe: automate the legislative document exchange workflow to support the implementation of the Lisbon Treaty
   - EDMA: automate the competition related document exchange workflow
4. Completing Open e-PRIOR user interface
5. Providing support and documentation

The deployment services are defined as an operational phase and will include both the deployments of existing functionality towards other users as well as the deployment of the new components.

Phase 2:

While Phase 1 is focused on proving the usability of the e-Prior components in sectors different from e-Procurement by adding a first set of additional features, Phase 2 introduces a parallelism between

- the definition of a robust architecture vision that would make the platform as the reference for cross sector business document exchange.

and

- the implementation of additional features and pilots that would prove the validity of the architecture.

The execution of phase 2 will cover the following:

1. Update of the Project Charter produced during the Inception of the previous phase to reflect the support of new functionalities and review the scope to focus on the definition of the Architectural Vision
2. Definition of a formal architecture vision described in a Software Architecture Document ("RUP" artefact) resulting from the study of possible convergence or re-use with /of solutions provided by other projects implementing similar solutions for trusted document exchange. The project that have been identified as providing a similar solution for trusted document exchange are:
    - EESSI (= Electronic Exchange of Social Security Information) by DG EMPL, and
    - PEC (Plate form d'exchange de confiance) developed by the "Direction Générale pour la Modernisation de l´État"
3. Definition of a "roadmap" to be followed in a further phase that should lead to have a streamlined "unified" solution for trusted document exchange.
4. In alignment with scheduled analysis and development in E-PRIOR, study the impacts and then implement the electronic signature and electronic notification in existing pilots.
5. Implementation of additional pilot projects (included the GUI adaptation):
    - GENIS,
    - ASAP,
    - eQuestionnaire
    - additional pilot in other policy areas (Internal Market and Employment)
6. Extension of the Administration GUI to support the introduction of new features (e.g.: e-Signature)
7. Start implementing some elements of the "roadmap" described in point 3.
8. Research and analysis of new pilots in additional sectors / policy areas.

The deployment services are defined as an operational phase and will include both the deployments of existing functionality towards other users as well as the deployment of the new components.

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. the adoption of an incremental development which progressively makes available the support of more complex interaction and exchange of additional business documents;
2. the re-use of best practices and existing implementation as well as the reference to existing standards that have been developed already.

1.8.6. COSTS AND MILESTONES

1.8.6.1. 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	Phase 1 - Execution report	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 + Design of consolidated Architectural Vision and Roadmap	200	ISA	Q1/2011	Q2/2011
Phase 2 - Execution	Phase 2 - Execution report	1.200	ISA	Q3/2011	Q2/2012
Phase 2 - Operational		150	ISA	Q1/2012	Q4/2012
	Total	3050			

1.8.6.2. Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	1.500	1500
2011	600	
2012	950	
2013		
2014		
2015		

1.9. Supporting tools for TSL and e-signature creation/verification

1.9.1. CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG MARKT
Associated Services	DG DIGIT 01; 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 trough 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. ORGANISATIONAL AND 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 could 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 would 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) could also be envisaged. Further an open format allowing implementers to report back test results easily could be proposed.

An additional study should 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 should 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.

1.9.7. COSTS AND MILESTONES

1.9.7.1.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)
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	100	ISA	Q3/2011	Q4/2011

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)
	e-signature creation and verification tool				
Execution	a) TSL quick desk research report and study on MS outreach & report; b) Workshop and its report	80	ISA	Q2/2011	Q1/2012
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	Q3/2012	Q1/2013
	Total	1210			

1.9.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	600	552
2011	310	
2012	300	
2013		
2014		
2015		

1.9.8. Annex: references

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 (OJ L 274 of 20.10.2009, replaced by the Corrigendum in OJ L 299 of 14.11.2009), amended by Commission Decision 2010/425/EU of 28 July 2010 (OJ L 199 of 31.07.2010).

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 for electronic signatures.

1.10. Internal Market Information (IMI) system

1.10.1. CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG MARKT
Associated Services	DG DIGIT (as system supplier), DG EMPL (awaiting a decision on use of IMI)

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 5600 competent authorities in 30 EEA Member States who use the application for two policy areas.

IMI meets the generic 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 5,600 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

Scope of IMI: IMI is an operational service which has been designed and developed as a generic, customisable, administrative cooperation platform. It provides public authorities in the 27 Member States and 3 EFTA countries with a fast, reliable, secure, traceable and trusted communication channel for any cross-border information exchange which is based on community legislation. The underlying principle of IMI is that public authorities responsible for

implementing and ensuring compliance with EU legislation in many different policy areas should not be presented with a proliferation of different information systems but rather a single interface to the IMI network; allowing effective communication with their counterparts which overcomes barriers due to different languages and 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 (Directive on the Recognition of Professional Qualifications and the Services Directive) and on 15th September 2010, the Council Working Party on Social Questions unanimously agreed with the recommendation of the Expert Committee on Posting of Workers that IMI appears to be the most appropriate tool to support the administrative cooperation provisions of the Directive on Posting of Workers. A pilot project in this area will begin early in 2011. DG MARKT is working closely with DG EMPL which is responsible for this initiative. On 4th November 2009, the Commission adopted a Green Paper on the interconnection of business registers, which concluded that "IMI appears to provide a viable means to temporarily or even permanently facilitate the communication of business registers in different Member States".

Other sectors (Electronic Commerce, Gambling, Company Law, Intellectual Property Rights, e-Procurement, Civil Status documents) have expressed a keen interest in using IMI to support the implementation of their legislation. In addition to the above sectors where detailed discussion has taken place, Member States have suggested a list of more than 40 additional policy areas where they believe that IMI could provide support for cross-border administrative cooperation.

DG MARKT, as the business owner of IMI, will propose a specific legal instrument for IMI, to ensure that there will be no legal obstacles to the use of IMI in other areas of administrative cooperation where no specific IT tool is foreseen in existing legislation. This could be an important contribution to a new approach towards administrative cooperation.

This action addresses the "trusted information exchange" priority area from the European Interoperability Strategy (EIS).

The scope of this action covers improvements to the services currently offered by IMI. The improvements include features identified in the inception study which were not delivered in the first version of IMI due to time constraints and improvements to key components which were identified and prioritised by stakeholders. Although the current services offered by IMI can be used by additional policy areas and user communities without the need for further development, this action also includes analysis of a full set of generic common administrative cooperation requirements beyond those currently offered by IMI with a view to developing an IMI administrative cooperation tool-kit

1.10.4. PROBLEM/OPPORTUNITY STATEMENT

Need for further development

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.

Development of IMI started in 2006 and by the end of 2008 it was operational for the first policy area, Professional Qualifications. A second policy area, the Services Directive, was added in 2009 and the use of IMI for administrative cooperation in that area is mandatory since 28 December 2009. The current user community comprises more than 5600 authorities at national, regional and local levels of government.

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 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.

Determining further developments

A number of the developments to be envisaged are the recommendations of the original external study commissioned jointly by DG DIGIT and DG MARKT in 2006 prior to beginning development of IMI. The purpose of the study was to propose a robust system architecture capable of delivering the modularity, flexibility, extensibility and scalability required of IMI. However, due to time pressure and lack of resources , not all the recommendations have already been integrated in the current system. The 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 two 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 January 2011, it is planned to have adopted a Commission Communication on the future strategy for the Internal Market Information system. At that stage it is expected to have a clear picture of the other sectors interested in using IMI and to be in a position to examine their needs in order to determine a generic set of common components for an administrative cooperation "tool-kit". The study will identify which components are currently missing from IMI and will examine the potential re-use of existing solutions available within the Commission.

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, the steering committee will determine priorities and working methods with a view to establishing an updated project charter by Q1 2011.

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	In addition to the benefits already provided by IMI, the overall set of proposed improvements will deliver significant benefits to users in Public Administrations by providing a more effective tool to implement the administrative cooperation provisions of EU single market legislation. The improvements reflect the demands of the current user community and stakeholders. They include enhancements to one of the key elements of IMI, the ability to identify interlocutors in other Member States. The improvement in the area of information exchange extends the current service offered and will allow MS to handle information requests more efficiently and according to different needs. Furthermore, the introduction of ECAS will provide the improved

Beneficiaries	Anticipated benefits
	security requested by MS and at the same time provide ease of access to a growing number of EU provided solutions. The requirements analysis for common components of the administrative cooperation 'tool-kit' will identify new tools which when incorporated into IMI will provide support for a wider range of cooperation via a single interface and avoid system proliferation.
European Commission Services	The EU in general will benefit from increased positive PR, generated by improving and extending a service already provided to MS and Public Administrations to support EU single market legislation. The development of an administrative cooperation 'tool-kit' would support a wider range of existing and new EU policy areas and avoid the costs and other drawbacks of system proliferation.

1.10.6. ORGANISATIONAL AND TECHNICAL APPROACH

Governance

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 to be submitted in May 2010
- 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
- Supervise timely delivery and quality of new developments delivered by the system developer

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 defined on the basis of experience gained, additional development needs for new policy areas, further improvements requested by the current users and the original study outlining the general architecture of the system and any external assistance that may be needed. Once the various elements for further development and improvement have been determined, the business requirements for each of these elements will be 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 Q2 2010.

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. . Hosting, promotion and training costs have been and will continue to be supported by DG MARKT.

The activities and deliverables described in this proposal are divided into two 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, will be included in an extended project charter to be produced in Q1 2011, these activities along with continued activities relating to the provision of IMI are considered as Phase 2.

Phase 1 addresses 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 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")

1.10.7. COSTS AND MILESTONES

1.10.7.1. 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)
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
Provision	Provision and improvement (maintenance and technical support)	450	ISA	Q3/2010	Q2/2011
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
Provision	▪ 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
	▪ Total	2.874			

1.10.7.2. Breakdown of ISA funding per budget year

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

1.10.8. Annex: references

- IMI inception study
- Vision Document IMI Version 2

1.11. Interoperable and Generic Notification Services

1.11.1. CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tools.
Service in charge	COMP
Associated Services	AGRI, MARE

1.11.2. OBJECTIVES

The goal of this project is to provide Generic Interoperable Notification Services (GENIS) that re-use existing corporate architectural infrastructure components. The main objective is to automate and secure the information exchanges between the Commission Services (COMP, AGRI, MARE) and the Member States within the State Aid Notification Process (definition in the Project Charter).

GENIS will improve the communication between European Commission and the national administrations in terms of flexibility (vis-à-vis IT implementation of legislation change), reliability and security. GENIS will provide interoperability to allow Member States to transmit data directly from their back-office systems to the Commission avoiding manual encoding of data.

GENIS addresses the domain of Government-to-Government (G2G), related to the following principles of the European Interoperability Framework:

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

1.11.3. SCOPE

The scope of GENIS is the design, development and implementation of services that will manage and support the exchange of information between Member States and the Commission within the State Aid Notification Process.

GENIS will cover exchange of structured and unstructured data:

- Pre-notification and notification of State Aid measures by the Member States to the Commission.
- Yearly revision of State Aid notifications (real expenditures) by the Member States.
- Management of communication and workflows (documents, messages, mails) between the Commission and the Member States during the State Aid Notification Process.

To support semantic interoperability, generic processes and multilingualism GENIS will implement:

- A semantic repository (metadata, dictionaries, translations).
- A repository of State Aid notification schemas.

To support interoperability GENIS will implement open interfaces (e.g. web-services) for the Member States to connect their back-offices with existing Commission systems.

In order to best align the implementation with the business needs, and to develop a system that is generic and interoperable, scalable and maintainable, GENIS will re-use corporate Service Oriented Architecture framework (e-Prior, IPCIS).

1.11.4. PROBLEM/OPPORTUNITY STATEMENT

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

- A complete documentation of the State Aid Notification Process covering COMP, AGRI and MARE does not exist.

- Existing systems do not cover all data exchange needs. In particular there are severe limitations in the management of the communications and underlying workflows between Commission and Member States.

- Existing systems are not flexible enough to deal with the complexity of the business context.

- Existing systems can not evolve or be adapted easily to cope with new requirements (e.g. legislation change that imply changes of notification schemas).

- New developments under the current architecture are slow, risky and expensive.

- Interoperability to the back-office systems of the Member States is not provided by existing systems.

That leads to a set of important opportunities for this project:

- Carry out a complete business analysis / modelling of the State Aid Notification Process (COMP, AGRI, and MARE) to better understand the business context, process boundaries and interactions with other processes.

- Design a new architecture for State Aid Notification Process by re-using existing corporate Service Oriented Architecture infrastructure (e-Prior, IPCIS), in order to enable GENIS to implement IT solutions to cover the business needs in a better, more efficient, flexible and scalable way, and to cope with new IT requests that result from legislation changes.

- Develop services based on the new architecture to cover the exchange of structured and unstructured data of the State Aid notification process, basically: Pre-notification and notification; Yearly revision of State Aid notifications; Management of communication workflows (documents, messages, mails) during the State Aid Notification Process.

- Provide interoperability to the back-office systems of the Member States.

1.11.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations	GENIS will increase the openness, effectiveness and efficiency, data preservation, data quality, and improve administrative simplification by implementing state-of-the-art user interface and provide interoperability to the back-office systems of the Member States for the pre-notification and notification of State Aid measures.
European Commission Services	GENIS will improve the transparency, openness, security and privacy and administrative simplification -both for the Commission Services and for the Member States- by implementing a service to manage the communication / workflows between Commission and Member States within the State Aid Notification Process. GENIS will contribute to multilingualism 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.
European Commission and its Services	GENIS will improve data quality and integrity, and preservation of information by implementing state-of-the-art user interface and interoperability to back-office systems of the Member States and by using reliable and trusted data transfer. GENIS will contribute to improved reusability, effectiveness and efficiency, and administrative simplification by reducing the costs to maintain and update (e.g. to adapt to changed legislation) existing IT services and by reducing the costs and risks of future developments by re-using corporate Service Oriented Architecture infrastructure.

1.11.6. ORGANISATIONAL AND TECHNICAL APPROACH

The organisation or governance proposed for this project will consist of:

- Steering committee: Composed by the directors of the service involved: COMP, AGRI, MARE. They will have the maximum responsibility and the decision capacity within the project. This committee will be lead by the project manager, a director from DG COMP.

- Internal user's group: Users group with users from the different services in the Commission involved in the State Aid Notification process. Their responsibility will be to provide inputs from the business perspective (Commission).

- Member States' user group: User group with representatives from the different Member States. Their responsibility will be to provide inputs from business perspective (Member States).

- System Provider: IT Unit of DG COMP (COMP.R3) is the unit responsible for the implementation of the system. The system provider will interact with the steering committee and the different users groups.

The interaction of the GENIS project with the e-Prior and Trusted Exchange Platform projects will be defined in the execution phase of Iteration 1 (see below).

TECHNICAL

From a technical point of view, the project will have an iterative approach. The first iteration will be executed between Q2 2011 and Q2 2012 and will consist of the following tasks and deliverables:

- Business analysis: During the elaboration of the project charter we have identify several business sub processes of the State Aid Notification Process involving exchange of data between Commission and Member States. Due to the complexity of the State Aid policy area, an in-depth study is needed to define the implications and interactions between the business processes in our scope and the rest of processes. We need a clearer definition of the boundaries of our action. The deliverable of this work will be a Business Architecture document.

- Architecture analysis: Aim: Analyse the corporate Service Oriented Architecture (e-Prior, IPCIS) with regard to the needs of the State Aid Notification Process (identify components to re-use, necessary developments). The deliverable will be the Information System Architecture document and a proof of concept.

- Analysis and prototype implementation of reusable building blocks needed for the next iteration.

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. The adoption of an incremental development which progressively makes available the support of more complex interaction and exchange of additional business documents;

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

1.11.7. COSTS AND MILESTONES

1.11.7.1. 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	410	ISA	Q2/2010	Q4/2010
Execution	Execution report: Business Architecture, IS Architecture, Prototypes of reusable building blocks.	850	ISA	Q1/2011	Q2/2014
	Total	1260			

1.11.7.2. Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	410	409
2011	350	
2012	500	
2013		
2014		
2015		

1.11.8. Annex: references

ANNEX 1. List of State Aid notification schemas by policy area and service in charge

ANNEX 2. List of State Aid notification schemas (stand: January 2010)

General notification schemas for **all policy areas** (service in charge: COMP):

- General State Aid.

- General State Aid – Pre-notification
- Simplified State Aid.
- Simplified State Aid – Pre-notification.
- Block Exempted State-Aid.

Notification schemas for **Agriculture policy** (service in charge: AGRI):

- Block Exemption Regulation Agriculture.
- 0. Information sheet for agriculture.
- A. Aids for investments in agricultural holdings.
- B. Aids for investments in connection with the processing and marketing of agricultural products.
- C. Agri-environmental and animal welfare aid.
- Cbis. Natura 2000 payments and payments linked to Directive 2000/60/EC.
- D. Aid to compensate for handicaps in certain areas.
- E. Aid for meeting standards.
- F. Aid for the setting up of young farmers.
- G. Aid for early retirement or for the cessation of farming activities.
- H. Aid to producer groups.
- I. Aid for land reparcelling.
- J. Aid to encourage the production and marketing of quality agricultural products.
- K. Aid for the provision of technical support in the agricultural sector.
- L. Aid for the livestock sector.
- M. Aid for the outermost regions and the Aegean Islands.
- N. Aid to compensate for damage to agricultural production or the means of agricultural production.
- O. Aid for combating animal and plant diseases.
- P. Aid towards the payment of insurance premia.
- Q. Aid for closing production, processing and marketing capacity.
- R. Aid for advertising of agricultural products.
- S. Aid linked to tax exemptions under directive 2003/96/EC.
- T. Aids for the forest sector.

Notification schemas for **Fishery policy** (service in charge: MARE):

- Aid for maritime transport.
- Aid for combined transport.
- Aid for the fisheries sector SIS under revision.
- Aid for TSE tests; fallen stock and slaughterhouse waste.

Notification schemas for **policy areas:** Employment, Regional Aid, Research, Social Affairs, Enterprises and Markets, Financial Sector, Culture, Environment, Energy, Transport (service in charge: COMP):

- General Block Exemption Regulation.
- SME Aid.
- Training Aid.
- Employment Aid.
- Regional Aid.
- Aid coming under the multi-sectoral framework.
- Aid to compensate for handicaps in the less-favoured areas.
- Research and development aid; in case of a scheme, in case of individual aid.
- Aid for audiovisual production.
- Environmental protection aid.
- Risk capital aid.
- Aid for rescue and restructuring firms in difficulty.
- Aid in the transport sector.
- Individual aid for restructuring firms in difficulty in the aviation sector.
- Aid for transport infrastructure.

1.12. Open source software for online collection of statements of support for European citizens' initiatives

1.12.1. CONTEXT

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 and on the other hand certification of online collection systems by the relevant Member State 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. 2. 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:

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 open source software will not offer the possibility to support a citizens' initiative with an electronic signature. Statements of support that have been signed using an electronic signature will be treated in the same way as statements of support in paper form. The actual signature of the signatory is not mandatory when the statement of support form is submitted electronically.
2. 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:

- only natural persons may submit a statement of support form online;
- 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.

- 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.
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.

1.12.6. ORGANISATIONAL AND TECHNICAL 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.

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

Phase 1 (Inception 1): Make a study of the already existing tools in the same domain. IT solutions developed within the eParticipation programme managed by DG INFSO will also be 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 will be the requirements for such a tool and which tools or components may be reused in this context.

Phase 2 (Inception 2): Having the results of phase 1, a feasibility study and project charter will be elaborated. 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 1, 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.

Phase 3 (Execution): The execution phase will be divided into two iterations. The first iteration will focus on the implementation (or adaptation) of the main services and components and the second one will cover remaining functionality identified during inception phase.

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

The services are spread over the two phases, fading out from a pro-active deployment mode in inception phase to a more supportive mode during execution phase.

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

1.12.7. COSTS AND MILESTONES

1.12.7.1. 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 1	Study	100	ISA	Q1/2011	Q1/2011
Inception 2	Project Charter	100	ISA	Q1/2011	Q2/2011
Execution	Execution report	300	ISA	Q2/2011	Q4/2011
	Total	500			

1.12.7.2. Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	-	50
2011	500	
2012	0	
2013	0	
2014	0	
2015	0	

1.13. LEOS - Legislation Editing Open Software

1.13.1. Context

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	Re-use of best practices and Office automation add-ons 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. Experience, lessons learnt, specifications, tools and components published as open source re-usable by any Member State or EU Institution Facilitate the interconnection of legal data bases and the performance of search engines

1.13.6. ORGANISATIONAL AND TECHNICAL 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.

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

The first phase (inception – 1) of the project will include 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.

Based on these results, the second phase (inception – 2) will assess

- The ongoing standardisation efforts (Metalex for instance) to define a common framework for the structure of legal texts

- The adequacy of off the shelf open source text editing software to offer re-usable solutions for drafting and editing laws

- The missing features and the add-ons that that might be necessary to answer the needs

Depending on the conclusions of the second phase, the **third phase** (Execution – 1) might be the construction of a prototype, *proof of concept*, 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.

1.13.7. COSTS AND MILESTONES

1.13.7.1. 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	200	ISA	Q2/2011	Q3/2012
Execution	Execution report		ISA	Q2/2013	Q3/2014
Operational			ISA	Q1/2015	Q4/2015
	Total	200			

1.13.7.2. Breakdown of ISA funding per budget year

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

1.14. Cross sector SOLVIT

1.14.1. CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG MARKT

Associated Services	DG DIGIT (system supplier),

1.14.2. OBJECTIVES

The proposed action is to develop a new cross–sector information system with the following objectives:

1. enable the SOLVIT network to move to the next generation where besides its initial function of problem solving it also needs to serve as an instrument for feedback on how the internal market is functioning in practice and enable policy makers to address these problems in a structural way, including the monitoring of how unresolved cases are followed up;
2. 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. Possible examples are the need to secure administrative cooperation in the field of social security (managed by DG EMPL), taxation (under the responsibility of TAXUD), residence rights and free movement of persons etc. A first business case may be co-operation between national administrations and the Commission in the field of social security: in the context of two regulations in place since May 2010 on the coordination of social security systems, an expert body composed by representatives of the different Member States is in charge of fostering and developing cooperation between Member States in social security matters, among others to facilitate the resolution of problems encountered on the ground;
3. offer a service oriented architecture in order to facilitate interoperability with other information systems both from the European Commission (EU Pilot, Your Europe Advice …) and the MS. This will make the access to the right information and/or service for European citizens and businesses more direct and efficient by better signposting and will improve follow up of cases/issues between systems.

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

- reduce administrative burden (support problem-solving in the context of misapplication of EU law in an easy and efficient way between MS);
- on the basis of the feedback provided by the cases, 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;
- support 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 directly via a web

application (the current SOLVIT system) 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 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 us 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.

1.14.4. PROBLEM/OPPORTUNITY STATEMENT

1. The initial system has been designed for the single purpose of making the problem solving more transparent and thus facilitating the functioning of the network. 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, 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 are 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 more widely concerning internal market issues and in other policy areas. For example, DG EMPL has expressed the need to use such an information system in the context of two new Regulations for the coordination of social security systems: Regulation 883/2004 and Regulation 987/2009, in place since May 2010. One of the key elements in the new Regulations is the enforcement of the principle of good cooperation and active assistance.

6. The new cross-sector system will be implemented with the knowledge and experience acquired during the development of the Internal Market Information System (IMI). The new system will re-use concepts and elements of IMI as a basis.

1.14.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Citizens and businesses	Citizens and businesses often encounter problems and barriers when getting their Internal Market rights by national public administrations. SOLVIT provides fast and free service and tries to solve the encountered problem 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 and that the potential is much wider. 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 the SOLVIT system to other policy areas (such as the social security) 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.
Public administrations from Member States	SOLVIT will enable administrations and MS to communicate in a most-efficient and faster way in order to solve problems related to the misapplication of EU law, first in the context of the Internal Market but ultimately in all other relevant policy areas. Only an information system can provide a means where all Member States can interact through one single interface. Problem-solving through SOLVIT has avoided a significant number of infringement procedures and formal complaints since problems can be solved in advance.
European Commission (MARKT, ENTR, EMPL, HOME, JUST, AGRI, TAXUD, MOVE; SANCO; EAC; SG)	The new SOLVIT system will assist the different services from the European Commission responsible for the good application of EU law and in some areas support the problem-solving or the citizens / businesses assistance processes. Improved possibilities for feedback will contribute to the picture of how the internal market is functioning in certain areas and make more transparent what problems need to be addressed.

1.14.6. ORGANISATIONAL AND TECHNICAL APPROACH

A Steering Committee composed of DG MARKT and the system supplier. The Committee will:

- Adopt the project charter
- set priorities
- Follow timely delivery and quality of new developments delivered by the system supplier

This project will be breakdown 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 in developing an information system supporting the new needs and features of the SOLVIT system and at the same time is 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.

1.14.6.1. 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		Internal DIGIT/MARKT resources	Q4 2010	Q1 2011
Execution	First release of the new and generic SOLVIT system to replace the current system	500	ISA	Q2 2011	Q4 2011
Execution	Second release of the new SOLVIT system including services and new requirements	300	ISA	Q4 2011	Q2 2012
	Total	800			

1.14.6.2. Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	-	-
2011	550	
2012	250	
2013		
2014		
2015		

1.15. Open Government Data

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:

a) 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.

b) 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 Cloud[2]. 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 project[3]. Moreover the newly launched LOD2 IP 7th Framework ICT project[4] 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)[5] 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 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.

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[2] http://richard.cyganiak.de/2007/10/lod/

[3] 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

[4] http://lod2.eu/WorkPackage/wp9.html

[5] http://latc-project.eu/

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:

7. 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.
8. 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.
9. 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.
10. Define the needs of a Commission OFG portal and propose an architecture for such portal.
11. 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	ISA		

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		

2. INTEROPERABILITY ARCHITECTURE

2.1. Elaboration of a common vision for an European Interoperability Architecture (EIA)

2.1.1. CONTEXT

Type of Action	Study
Type of Activity	Common frameworks
Service in charge	DG DIGIT
Associated 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 elaborate with the Member States and the concerned Commission services a joint vision on interoperability architecture 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.

2.1.3. SCOPE

This action belongs to the Interoperability architecture cluster. The related activities range from creating the interoperability architecture itself as a common framework (the main building blocks and their interfaces) to supporting this architecture and then, if relevant, to set up and provide common infrastructure services.

2.1.4. PROBLEM/OPPORTUNITY STATEMENT

During the EIS study phase 1 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
European Commission Services	Better efficiency in establishing European Public Services

2.1.6. ORGANISATIONAL AND TECHNICAL APPROACH

This action will consist of launching a preparatory study in order to establish a common vision (identification of scope, common components, common infrastructure services, interface standards).

The study will encompass:

Phase 1

- gathering existing interoperability architecture state of play and lessons learnt (mainly around Service Oriented Architecture),
- reuse the outcomes of the European Interoperability Infrastructure Services study (EIIS);
- assessing possible impact of such interoperability architecture at EU level,
- designing an EU interoperability architecture (main components and common interfaces)

Phase 2

- supporting reaching agreement on a set of common infrastructure services, as part of the overall interoperability architecture, that should be set up and provided at EU level.

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

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

2.1.7. COSTS AND MILESTONES

2.1.7.1.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	Interoperability Architecture	500	ISA	Q3/2010	Q3/2011
Study	Interoperability Architecture specifications	300	ISA	Q3/2011	Q2/2012
	Total	800			

2.1.7.2.Breakdown of ISA funding per budget year

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

2.2. CAMSS - Common Assessment Method Standards and Specifications

2.2.1. CONTEXT

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

2.2.2. OBJECTIVES

The objective of the CAMSS action is to establish and maintain 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 will contribute significantly to confidence in 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 activity cluster in the Commission draft, "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.

The CAMSS action provides a framework for the preparation of interoperability recommendations on standards and formal specification(s) and Interoperability Statements, fulfilling the above mentioned proposals and suggestions. When establishing European Public Services, Public Administrations should, as much as possible, base interoperability agreements on existing market supported standards/formalised specifications and, when selecting them a structured, transparent and objective approach should be followed.

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. These same is true when various Member States want to link up their systems in order to establish European public services.

Decisions on (recommendations of) formal specifications often call for resource intensive and time consuming assessments. By sharing and re-using assessments done in other Member States, the burden of assessment could be partly eased. 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 could lead o better decisions.

2.2.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations, Standardisation Bodies and IT Services Industry	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. The main benefits for using CAMSS are: ▪ To avoid duplication of effort, for the already finalised assessments of standards and specifications can be shared, at least partially, between Member States ▪ The possibility of more efficient use of public funds, because of easier and faster assessments and a common library for standards meant for similar business process needs ▪ To improve the expertise of civil servants on evaluation of standards and specifications ▪ To offer a complimentary tool to support European Interoperability Framework in the evaluation of European or national interoperability standards and specifications

2.2.6. ORGANISATIONAL AND TECHNICAL APPROACH

The Commission closely collaborates with Member States and standardisation bodies to transpose the work done under IDABC in a clear guideline, or CAMMS handbook. The Commission will coordinate consensus building around that guideline, and ICT industry will be consulted. Also the proposal for the organisation and governance of the CAMSS assessment library will be planned.

2.2.7. COSTS AND MILESTONES

2.2.7.1.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	Coordinating consensus building around CAMSS and transposing the CAMSS work done under IDABC into a clear guideline / handbook.	150	ISA	Q1/2011	Q3/2011
Phase 2	Planning the organisation structure and governance of CAMSS for maintenance and further development.	200	ISA	Q4/2011	Q2/2012
	Total	350			

2.2.7.2.Breakdown of ISA funding per budget year

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

2.2.8. Annex: references

[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0324:EN:NOT

[2] 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

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. ORGANISATIONAL AND 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.

2.3.7. COSTS AND MILESTONES

2.3.7.1.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)
Operational	infrastructure	400	ISA	Q3/2010	Q2/2014
Operational	certificates	1.500	services / agencies	Q3/2010	Q2/2014
	Total	1900			

2.3.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	300	6
2011	25	
2012	25	
2013	25	
2014	25	
2015		

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:

1. 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.
2. The consolidation of existing data networks currently spread over different contracts and independently managed by other Institutions or European bodies.
3. Security: The provisioning of a secured, RESTREINT UE accredited communication infrastructure.
4. 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.
5. Management: The overall project management as well as service management and administrative management of the sTESTA networking services.
6. 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 trough 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 our 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	20.000	ISA	Q4/2011	Q3/2013
Operational	Continuation of the new sTESTA services	32.400	ISA	Q4/2013	Q3/2016
	Total Budget	74.300			

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	11.200	
2013	10.800	
2014	10.800	
2015	10.800	

2.5. CIRCABC

2.5.1. CONTEXT

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

2.5.2. OBJECTIVES

CIRCABC 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 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 EIIS study, CIRCABC architecture and availability under the EUPL license enables 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 an 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 will start 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:

- 25 CIRCABC OSS deployments
- 16th on 64 top download OSS
- 6th on 100 most viewed OSOR page
- 7th most active in OSOR
- 1st in number of posts in OSOR
- 3190 groups will be migrated from CIRCA to CIRCABC

- 1500+ Service Help-Desk calls in 2009

2.5.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Institutions	CIRCABC service is readily available to institutions to ease the collaborative work around policy and projects along documents lifecycle.
Member States' Public Administrations and other, non EU administrations	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. ORGANISATIONAL AND TECHNICAL APPROACH

The project will be managed by DIGIT A and will contract external resources for service management, maintenance, community management and help-desk support. DIGIT A will provide 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 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.

2.5.7. COSTS AND MILESTONES

2.5.7.1.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)
Operational	CIRCABC Service	2.008	ISA	Q3/2010	Q4/2015
Execution	Communication/Training	145	ISA	Q1/2010	Q4/2015
	Total	2.153			

2.5.7.2.Breakdown of ISA funding per budget year

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

2.6. Interactive Policy Making (IPM)

2.6.1. CONTEXT

Type of Action	project
Type of Activity	common services
Service in charge	DG DIGIT
Associated Services	DG MARKT (EBTP / Service Directive)

2.6.2. OBJECTIVES

The IPM service deployed by DIGIT is widely used by the Institutions and in Member States. It enables to easily collect key information for decision making process 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 but also to many other various types of surveys.

As IPM is available from a software source forge (currently OSOR) 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 answer surveys and concentrate back on their core business and activities.

IPM key figures:

- 22nd on 64 top download OSS
- 17th on 100 most viewed OSOR page
- 4th in number of posts in OSOR
- 1107 surveys in 2009 with 762 policy surveys
- 1650+ Service Help-Desk calls in 2009

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. ORGANISATIONAL AND TECHNICAL APPROACH

The project will be managed by DIGIT A and will contract external resources for service management, maintenance, community management and help-desk support. DIGIT A will provide 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.

2.6.7. COSTS AND MILESTONES

2.6.7.1.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)
Operational	IPM Service	1458	ISA	Q3/2010	Q4/2015
Execution	Training	170	ISA	Q1/2011	Q4/2015
	Total	1628			

2.6.7.2.Breakdown of ISA funding per budget year

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

2.7. Your Europe – Facilitating the re-use of content from National portals

2.7.1. CONTEXT

Type of Action	Study
Type of Activity	Common frameworks
Service in charge	DG ENTR
Associated Services	DG MARKT B.TF1

2.7.2. OBJECTIVES

Through this action, the Commission would like to have an automated 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.

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 and business.

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 offers the opportunity to propose a semantic asset to the Member States for the structure of their information portals making information exchange between these portals and Your Europe simpler and faster.

2.7.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States' Public Administrations and their ICT suppliers	National administrations benefit in the first place from a reusable semantic asset for their national information portals. By using the same asset semantic interoperability will be ensured. Beyond this the Member States' public administrations would benefit from a coordinated and structured way of providing information. They could find all administrative requirements in other countries on Your Europe. This information would be available in EN, FR, DE, facilitating in this way the mobility of their own nationals in other countries. Through content syndication the resource intensiveness for the content provision would be kept at a minimum level. The time invested by citizens and business to find out the information they need to perform a task in another EU country would also be reduced. Member States that have not yet set up their national information portals, could re-use the life-cycle structure of the Your Europe portal as the basis for the creation of their portals.
EU Institutions and agencies services	Available EU assistance services (Europe Direct, Enterprise Europe Network, CSS, SOLVIT, European Consumer Centres network, etc.) can provide their services directly via Your Europe.

2.7.6. ORGANISATIONAL AND TECHNICAL APPROACH

This activity will be carried out in two phases. The first phase will consist of a feasibility study which will end with a detailed project charter highlighting the concrete steps to take in order to achieve the objectives of this action. This phase will also provide the specifications for any development needed. This phase will identify the practical information or content that will be needed by business and citizens to exercise their EU rights in another country and assess whether the available content syndication toolbox achieved under the work package of the EU-SPOCS can be re-used. The second phase would involve the execution of a pilot phase with a reduced number of countries and followed by the progressive roll out to others and the operational phase. At the introduction of the content syndication different means and ways will be explored so as to make sure that also those countries which won't follow exactly the proposed structure as laid down in the semantic asset will still be able to provide content to Your Europe.

The project would be managed by a Project Management Board consisting of the leading EC services (DG ENTR and DG MARKT). The two services dedicate a total of four staff to ensure the proper execution of the project. Responsible policy units for single market rights in DG MARKT, DG TAXUD, DG SANCO, DG EMPL will be regularly invited to contribute to the content development of the portal as they are already involved into the project at its current stage. The present project does not have the aim to finance the recurrent costs of the operation of the portal; it is solely intended to give support to a further technical development to the portal. For the coverage of the recurrent costs DG ENTR and DG MARKT will ensure a proper financing. DIGIT's expertise on technical aspects will also be sought when needed.

Member states' public administrations will also be closely involved in the different project phases through the existing Your Europe Editorial Board to discuss and agree upon the proposals for common terminology and the choice of the most appropriate content syndication tool - possibly the open source content syndication toolbox from SPOCS. Therefore the first contacts have already been established.

This main tool to be used for this action's development of the semantic asset and the collaboration between the Your Europe and the member States will be the SEMIC.eu platform, which is designed specifically for such activities of cross border semantic asset development.

2.7.7. COSTS AND MILESTONES

2.7.7.1.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	Project Charter; Feasibility study and technical specifications	200	ISA	Q3/2010	Q2/2011
Study	Execution report; proposal defining a common multilingual terminology and content structure for Your Europe portal and national portals;	500	ISA	Q3/2011	Q3/2012
Operational					
	Total	700			

2.7.7.2.Breakdown of ISA funding per budget year

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

2.7.8. Annex: references

Minutes of the last Editorial Board meetings

2.8. Machine Translation Service by the European Commission

2.8.1. CONTEXT

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 existing European Commission Machine Translation Service (ECMT). 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 has made available the ECMT service to European and national public administrations.

However the ECMT service will soon be phased out, as it uses 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 AsiaOnLine (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, AsiaOnline 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 present 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	Main use: Asynchronous MT of working documents, letters, emails (like the present ECMT) - 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	Main use: Public administrations may use it for asynchronous MT of working documents, letters, emails (like the present ECMT) - 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

Beneficiaries	Anticipated benefits
	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	Online services offered or supported by the Commission 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). Benefits: - 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 languages through MT@EC.
Member States' Public Administrations	Networks of member states representatives at EU level 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 Benefits: - efficiency: national exerts 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. ORGANISATIONAL AND 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.

2.8.7. COSTS AND MILESTONES

2.8.7.1. 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 Phase 1	Project Charter (initial version)	330	ISA	Q4/2010	Q2/2011
Inception phase 2	Project Charter (detailed version) Architecture Risk list Prototype	1000	ISA	Q2/2011	Q2/2012
	Total	1330			

2.8.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	330	272
2011	1000	
2012		
2013		
2014		
2015		

2.9. Document repository services for EU policy support

2.9.1. CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tools
Service in charge	DG DIGIT
Associated Services	Policy DGs (e.g. FP7 DGs, SFC2007 DGs…)

2.9.2. OBJECTIVES

The objective of this project is to provide generic document management components for EU policy support that can be used by Member States' public administrations, European Institutions 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 15.000 internal users and is estimated to be used by 25.000 users by the end of 2010. Its usage is currently increasing significantly, estimating that by the end of 2010, more than 3 million attachments will have been stored this year in HERMES, with an average size of 0,5 MB (=1,5 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 of HERMES and/or CIRCABC.

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 extend 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 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 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 in the European Commission (e-Domec), 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. The 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 to execute multilingual document searches.

Both HERMES and CIRCABC have been identified as re-usable components by the EIIS 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, European Institutions 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. ORGANISATIONAL AND TECHNICAL APPROACH

The approach of the project is based on two 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. EIIS 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.

2.9.7. COSTS AND MILESTONES

2.9.7.1.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	350	ISA	Q2/2010	Q4/2010
Execution	Execution Report - TBC	1300	ISA	Q1/2011	Q3/2012
Operation		150	ISA	Q1/2012	Q4/2012
	Total	1800			

2.9.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	350	350
2011	450	
2012	1000	
2013		
2014		
2015		

2.10. Multisectorial crisis and business continuity services

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	- Free to use open source tools for implementing crisis and business continuity processes, for which maintenance and further development are guaranteed. - Better integration of crisis and business continuity IT Systems - Better messaging and better tracking of messages - Solid, scalable and extensible interoperability platform - Increased level of cooperation between stakeholders from EC and Member States - 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:

1. 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
2. the adoption of an incremental development process which progressively makes available the support of more complex interaction;
3. 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		

2.10.8. Annex: references

1. Commission Staff Working Document - Framework for Business Continuity Management in the Commission [SEC(2006)898]

2. Commission Decision on Provisions for Setting-up the ARGUS General Rapid Alert System [C(2005)5306]

3. ARGUS Vision Document <<no ref >>

4. 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

5. OASIS CAP - http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=emergency

2.11. Integrating EU e-procurement infrastructure

2.11.1. CONTEXT

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 COM and MSs a coherent set of information products supporting EU-wide cross-border accessibility and interoperability of e-procurement operations in order to facilitate MS implementation of the EU PP directives through the following tasks:

- Select sample real-life e-procurement operations for detailed analysis against principles, policy priorities and requirements established in the European Interoperability Strategy and European Interoperability Framework (EIF) for public services;
- define out of best practices reference implementation models, covering all EIF layers;
- define indicators and a method for monitoring e-procurement use and performance;
- perform gap analysis of market products against the models and find out missing building blocks; launch relevant standardisation activities;
- develop user guidance for setting up e-procurement operations;
- provide complementary support tools to help complete administrative formalities which may impede cross-border interactions.

2.11.3. SCOPE

The project goal is to support cross-border participation in e-procurement and the wider internal market policy. A key impediment to this policy goal is the absence of interoperability and interconnection between local e-procurement solutions. The envisaged work fits within the logic and rationale of the EIS. There are no technical barriers to pan-European EIF-compliant e-procurement services. However the ongoing evaluation of the e-procurement Action Plan shows that uncoordinated deployments continue to prevent cross-border procurement. The information tools that will be produced aim to identify common forms of barrier to inter-operability and participation in cross border e-procurement; develop and share with the MSs greater capacity to monitor e-procurement developments; develop common tools and approaches to overcome obstacles. This entry builds on previous work on e-procurement under IDABC providing the conceptual foundation for continued standardisation and the action is fully coordinated with related ISA entries on Peppol and ePrior. It will seek to identify bottlenecks and contribute to the identification of remedial actions to optimise the future COM policy in the field of e-procurement as a follow up to the Action Plan evaluation.

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 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 realisation is very challenging to deliver 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 support in designing fully EIF-compliant e-procurement operations, enabling cross-border access and interoperability.
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-commerce 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 procurement).

2.11.6. ORGANISATIONAL AND TECHNICAL APPROACH

The focus of the initiative is on gathering information through study of the complex and growing e-procurement landscape. Information will be of a practical nature, designed to identify concrete and recurring problems for contracting authorities and economic operators linked to the decentralised process of e-procurement infrastructure building.

Technical tasks will be entrusted to selected contractor(s). Strategic decisions will be made in collaboration with an Inter-service Steering Group composed of representatives of concerned Com Services (MARKT, INFSO, ENTR) and will be submitted to for advice of the National experts within the epWG (i.e. the e-procurement Working Group, the technical arm of the ACPC committee supporting DG MARKT). These in particular will be asked to mobilise national stakeholders to help Com identify and share goals and approach.

Work will build on the results of the 2004 e-procurement action plan and its current evaluation. It will maintain the focus on experience of contracting authorities and suppliers in making use of e-procurement platforms.

The information gathering work will feed policy requirements and goals on planned activities that include:

- identification and mapping of national e-procurement infrastructures and systems, and identification of barriers to participation in procurement procedures organised through these systems;

- examination of EU e-procurement solutions and the data collected. Key areas will be selected where existing monitoring is insufficient and a generalised monitoring framework will be defined and tested.

- Definition of an EIF-based model for design and set up of e-procurement operations in the pre-award phases. The model will address the 4 interoperability dimensions of EIF and specify building blocks to build target reference solutions for each of the procurement procedures set out in the directives;

- identification of processes or applications which could benefit from standardisation in order to facilitate inter-connected e-procurement systems;

- help for the Commission drafting of design and procurement guidelines for administrations wishing to set up e-procurement systems, including use of electronic catalogues in Dynamic Purchasing Systems and electronic Framework Agreements;

- continued operation and evolutionary maintenance of the eCertis information system on certificates and attestations most frequently required in public procurement.

The following projects are planned:

Monitoring e-Procurement

- In the first phase, this will consist of a scoping study to

    - to identify indicators and define future monitoring arrangements at EU and national levels; and

    - review and map EU e-procurement infrastructure and identify potential data sources

Indicators to be considered include: measures of e-Procurement use, procurement transactions completed through dedicated e-procurement systems or platforms, (covering both monetary value and number of contracts); types of purchases being made; some measure of the different barriers being encountered.

- A second phase will then roll-out the proposed monitoring system across all Member States.

Pre-award components

- Identification of detailed priority requirements necessary to create inter-operable pre-award systems. This will utilise some of the information collected in phase 1 of the monitoring project, relating to existing infrastructure.

- A more detailed study to define the standardisation requirements necessary to address key issues affecting the pre-award phases of e-Procurement and facilitate inter-connections between e-Procurement systems. This will draw on outputs from the expert group.

Work will be carried out in synergy with the actors concerned in other major e-procurement-related projects candidate for ISA funding, namely ePrior and Peppol sustainability.

2.11.7. COSTS AND MILESTONES

2.11.7.1. 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 - Phase 1 (monitoring)	Review and mapping of EU e-procurement infrastructure identification of feasible indicators	300	ISA	Q1/2011	Q4/2011
Study - Phase 2 (monitoring)	Implementation of e-procurement monitoring system	200	ISA	Q1/2012	Q4/2015
Study - Phase 2 (monitoring)	definition of basic methodology	150	DG MARKT	Q1/2011	Q4/2011
Study Phase 3 (pre-award)	Definition of an EIF-based model for design and set up of pre-award e-procurement operations	110	ISA	Q3/2011	Q3/2012
Study - Phase 4 (pre-award)	Study on standardisation requirements	120	ISA	Q1/2012	Q2/2013
	Total	880			

2.11.7.2. Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	-	-
2011	300	
2012	230	
2013	100	
2014	50	
2015	50	

2.11.8. Annex: references

COM(2004)841 - Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Action plan for the implementation of the legal framework for electronic public procurement.

European Interoperability Strategy and European Interoperability Framework for public services.

2.12. eHealth European Interoperability Framework

2.12.1. CONTEXT

Type of Action	Study
Type of Activity	Common Framework
Service in charge	INFSO H1
Associated Services	DG MARKT.C4 - DG ENTR.D4

2.12.2. OBJECTIVES

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". Part of the action plan related to this item is in 2010 to develop the first notion of a future European Framework for interoperability, testing and certification of eHealth systems. The goal of this eHealth European Interoperability Framework would be to define and agree on a common set of standards (and relevant standardization bodies), profiles, testing tools and procedures, quality management system, certification scheme, roles, responsibilities and processes. It is then foreseen in 2011 to launch legislative action in the frame of the European Interoperability framework and the EU wide methods for eHealth Interoperability testing and certification. The objective of the requested action would be to develop such an eHealth European Interoperability Framework taking into account the many elements of such a framework which were developed by existing eHealth projects such as ePSOS, Calliope, Hitch, eHRQTN, NetC@rds, but also generic projects such as STORK.

It relates to the ISA work program's goal to support and promote the creation and improvement of common frameworks in support of interoperability

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

The Commission has funded several projects and studies related to the interoperability of eHealth systems:

1) epSOS,

which is a Europe-wide project representing 23 EU-member states, and whose consortium includes ministries of health, national competence centres and numerous companies. The overarching goal of epSOS is to develop a practical eHealth framework and an Information & Communication Technology (ICT) infrastructure that will enable secure access to patient health information, particularly with respect to basic patient summaries and ePrescriptions between different European healthcare systems. It means that epSOS has basically developed an ad hoc

interoperability framework for two eHealth use cases from which the study should start in order to leverage the considerable amount of work done and assets already developed.

2) CALLIOPE,

which stands for "CALL for InterOPErability" is a network of collaborating organizations mandated to develop a roadmap for eHealth interoperability which the study should take into account. CALLIOPE has been initiated by 28 founding members comprising 17 organisations representing national governments and eHealth competence centres and 11 EU-level stakeholder organisations of health professionals, patients, health insurers and industry.

3) HITCH,

is a research project for developing the European Union's roadmap for Interoperability Conformance Testing of information systems in the field of Healthcare. This roadmap will also be a building block for the study.

4) eHR-QTN,

eHR-QTN is a Thematic Network that prepares the health community across Europe for systematic and comparable quality assurance and certification of e-Health products, more specifically of the Electronic Healthcare Record systems.

There is an alignment of actions and projects in the frame of eHealth Interoperability which will provide the building blocks of the eHealth European Interoperability Framework. Results from former studies, such as SemanticHealth, should also be taken into account.

Politically, the draft Cross Border HealthCare Directive, with its article 13 on eHealth (definition of a standard common patient data set), participates to the political momentum and the opportunity which the study will seize.

2.12.5. EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member states	Will be guided (and this is one of their main request) and coordinated in their efforts to build national and international interoperable eHealth infrastructure.
EC	Will have the rational arguments to be able to build a plan to massively deploy cross border eHealth services in a sustainable way.
Health Care Providers	Will be able to provide cross border care in the safest way.
EU citizens/patients	They will be able to fully enjoy the possibility to get Healthcare outside their country of origin.

2.12.6. ORGANISATIONAL AND TECHNICAL APPROACH

The action will consist of launching a study whose main deliverable will be the eHealth European Interoperability Framework.

Directorate General Information Society would specify and lead the study, in order to take into account assets developed by existing Commission projects (epSOS, CALLIOPE, HITCH, eHR-QTN, STORK, NetC@rds), to liaise with them and with related political initiatives (CrossBorder Directive, eHealth Governance Joint Action, etc.).

2.12.7. COSTS AND MILESTONES

2.12.7.1. 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		400	ISA	Q3/2011	Q2/2012
	Total	400			

2.12.7.2. Breakdown of ISA funding per budget year

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

3. ASSESSMENT OF ICT IMPLICATIONS

3.1. Assessment of ICT implications of EU legislation

3.1.1. CONTEXT

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	DIGIT.B.2

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 2010-2011 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/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. ORGANISATIONAL AND TECHNICAL APPROACH

2010-2011 Pilot phase

The pilots will be facilitated by DIGIT 01 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.

2011-2015

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.

During the roll-out, the goal is to train one expert group per DG "on the job" on the method so that in the future, the DGs can run assessments themselves. At the end, participating DGs should have received a sound assessment of the ICT implications of their legislation.

3.1.7. COSTS AND MILESTONES

3.1.7.1.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	3 Pilot assessments Refinement of method and elaboration of tools	150	ISA	Q03/10	Q04/11
Study	9-18 assessments with different Commission Services	1.200	ISA	Q02/11	Q04/13
Study	6-12 assessments with further Commission Services	800	ISA	Q02/13	Q04/15
	Total	2.150			

3.1.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	150	42
2011	400	
2012	400	
2013	400	
2014	400	
2015	400	

4. ACCOMPANYING MEASURES

4.1. Raising interoperability awareness

4.1.1. Communication activities

4.1.1.1.CONTEXT

Type of Action	Accompanying measure
Type of Activity	Communication activities
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.ORGANISATIONAL AND TECHNICAL APPROACH

The communication activity will be run by DIGIT with the support of an external contractor.

In a first phase, a global communication strategy for the ISA programme will be developed and a communication programme established. This global strategy and the related communication programme will make up the common foundation for communication activities at action level.

The global communication programme will be implemented as part of a second phase. While the global communication programme will run continuously for full the duration of the programme, campaigns for specific actions and solutions will, whenever appropriate, be 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 programme 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.

4.1.1.7.COSTS AND MILESTONES

4.1.1.8.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	Development of a communication strategy and communication plan at ISA programme level	100	ISA	Q3/2010	Q1/2011
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	7.550	ISA	Q3/2010	Q4/2015
	Total	7.650			

4.1.1.9.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	1.050	1430
2011	1.100	
2012	1.100	
2013	1.350	
2014	1.650	
2015	1.400	

4.1.2. Interoperability Maturity Model

4.1.2.1.CONTEXT

Type of Action	Accompanying measure
Type of Activity	
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

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

4.1.2.8. 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	300,00	ISA	Q3/2011	Q1/2012
	Total	300			

4.1.2.9. Breakdown of ISA funding per budget year

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. ISA Integrated Collaboration Platform

4.2.1.1.CONTEXT

Type of Action	Project
Type of Activity	Reusable generic tool
Service in charge	DG DIGIT
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, developments and operational costs, to ease service management and to search for synergies to 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 migrate to the new platform as soon as possible. e-EPractice.eu will migrate at the end of the current contract.

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), that 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 vs. 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 platform 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 them transparently from ePractice.eu contents)

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.ORGANISATIONAL AND TECHNICAL APPROACH

In summary, the project will contain two 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 ePractice.eu and OSOR.eu). All current services, which are used by the users will be included in the future platform.

The targeted common technical platform will be based upon existing Open Source Software packages and will re-use expertise and components of the Flexible Platform For Internet Services (FPFIS) environment at the Data Centre of the European Commission.

The FPFIS project provides communication and collaboration Web 2.0 solutions (e.g. content management system, forums, blogs, wikis, etc.) based on existing Open Source Software and provides a technical platform in the form of a clone-able reference configuration with a set of "black-box" pluggable OSS solutions.

The solution will be mainly based on out-of the box modules to benefit of the community support.

The project will be managed by DIGIT.A3 in collaboration with DIGIT.01 and DIGIT C and will contract external resources for the studies, analysis, service management, evolutive maintenance, development and support. DIGIT.A3 will provide a Project Responsible and a Project Manager, both Officials in the unit.

4.2.1.7.COSTS AND MILESTONES

4.2.1.8.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	Detailed system specifications and project plan	50	ISA	Q3/2010	Q3/2010
Execution	Implementation of the new integrated collaboration platform v1	500	ISA	Q3/2010	Q2/2011
Operational	provision and improvement of tool	657	ISA	Q2/2011	Q4/2015
Operational	Support of the current platforms (OSOR and SEMIC)	400	ISA	Q3/2010	Q3/2011
	Total	1607			

4.2.1.9.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	706	693
2011	375	
2012	130	
2013	132	
2014	132	
2015	132	

4.2.2. Community building and effective use of the collaborative platforms

4.2.2.1.CONTEXT

Type of Action	Accompanying Measures
Type of Activity	
Service in charge	DG DIGIT
Associated Services	INFSO

4.2.2.2.OBJECTIVES

The objective of the action is to support 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.ORGANISATIONAL AND TECHNICAL APPROACH

The action will be a continuation of the content dissemination and community animation related tasks of the GPOSS, NIFO, SEMIC and ePractice projects launched under the IDABC 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 Integrating EU e-procurement infrastructure 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 the current OSOR.eu, ePractice and SEMIC.eu platforms until the implementation of the new Integrated Collaboration Platform as a technological basis, plus additional social networks and other 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.)

4.2.2.7.COSTS AND MILESTONES

4.2.2.8.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)
Operational	Moderation of online discussions, supporting online communities and support for existing communities, showcasing of best practices.	5.796	ISA	Q4/2010	Q4/2015
Operational	Hosting of the ISA integrated collaborative platform (providing the platform as a common service)	1754	ISA	Q1/2011	Q4/2015
	Total	7550			

4.2.2.9.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	450	450
2011	1.300	
2012	1.300	
2013	1.500	
2014	1.500	
2015	1.500	

4.2.2.10. Annex: references

Action: Integrating EU e-procurement infrastructure in support of the EU E-procurement Action plan and its follow-up

Action: Methodologies for the development of semantic assets

Action: Integrated Collaboration Platform

4.2.3. National Interoperability Framework Observatory - NIFO

4.2.3.1.CONTEXT

Type of Action	Study
Type of Activity	Common Framework
Service in charge	DIGIT 01
Associated Services	

4.2.3.2.Objective

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 twofold:

- Define a NIFO maintenance process including the updating of the EU public administrations eGovernment Factsheets with the validated information from both the detailed and high level analysis depending on whether a NIF is available or not.

- Provide assistance to the EU public administrations to apply the EIF at national level, first and foremost by aligning the interoperability initiatives to the EIF.

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 programme[6]. 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 14 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 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

e	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.
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.

[6] http://ec.europa.eu/idabc/

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.ORGANISATIONAL AND 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 interim online presence of the NIFO is through ePractice.eu which includes all the necessary information like the factsheets and analytical model. This however eventually be migrated to the new integrated platform.

A maintenance process for the NIFO should be defined and will run on annual basis to keep the information on national interoperability initiatives relevant and accurate. This will not only consist of the updates of the factsheets themselves but also an update of the analytical model and its representation.

A two step approach will be taken in order to provide the necessary assistance to the EU public administrations to apply the EIF at national level. The first step will be to undergo a gap analysis study that will highlight the differences between the NIFs / initiatives and the EIF. The results of this analysis will also be used as an input to another action of the ISA work programme, the Interoperability Maturity Model7. This gap analysis will also be useful to the EU public administrations to understand the actions to be taken. The second step will then focus on how to address the differences identified. This will be presented to the EU public administrations in the form of guidelines.

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.

4.2.3.7.COSTS AND MILESTONES

4.2.3.8. 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	200	ISA	Q2/2011	Q4/2011

[7] 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

	Analysis study between the NIFs and the EIF; Support of alignment of NIFs to the EIF through the development of guidelines				
Operational	Maintenance of the NIFO process including the update of the eGovernment factsheets;	600	ISA	Q1/2012	Q4/2015
	Total	800			

4.2.3.9. Breakdown of ISA funding per budget year

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

5. PROGRAMME MANAGEMENT

5.1. Monitoring and Evaluation

5.1.1. CONTEXT

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	1. Ensure the objectives of the ISA Decision are met 2. Cost reduction, as underperforming actions will be identified sooner 2. Improve management process of the ISA program 3. Increase transparency of the ISA work-programme investments 4. Better decision-making tool
ISA Committee	1. Better communication of the results of individual actions 2. Improved information of the overall ISA work-programme

5.1.6. ORGANISATIONAL AND TECHNICAL APPROACH

Setting up the measurement system requires three different activities:

1. Establish the measurement and related management processes

The aim is to establish a measurement process for the whole ISA work-programme (both at programme and activity levels). This task will be completed by DIGIT.01 with the help of external contractors.

2. Implementing the above mentioned processes in the adequate set of tools.

This second activity will involve the selection and implementation of a collection of tools for the purpose, including project and portfolio management and customer relationship management software. In order to ensure the effective provision of such tools DIGIT may use an external contractor.

3. Execution of the measurement program

The measurement program outlined in paragraph 1 will be implemented on a monthly, quarterly, semester and yearly fashion up until the end of the program. 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). This task will be completed by the project managers of the different actions of the ISA work-programme and DIGIT with the aid of external contractors.

5.1.7. COSTS AND MILESTONES

5.1.7.1.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	Design and implementation of measurement process	200	ISA	Q3/2010	Q1/2011
	Selection and implementation of software tools	500	ISA	Q3/2010	Q4/2011
Phase 2	Software services, maintenance and adaptation	1.000	ISA	Q1/2012	Q4/2015
	Monitoring & evaluation process team	1.500	ISA	Q1/2011	Q4/2015
	Total	3.200			

5.1.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	350	348
2011	650	
2012	550	
2013	550	
2014	550	
2015	550	

5.2. EIS Governance support

5.2.1. CONTEXT

Type of Action	Accompanying measures
Type of Activity	Management activities
Service in charge	DG DIGIT
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 an 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 yearly cycle with:

- a permanent activity on screening which changes at EU and Member State level might have an impact on the EIS and on monitoring ongoing interoperability projects;
- once a year activities supporting EIS updating.

Each yearly update of the EIS may have an impact on the ISA Work Programme and probably 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 draft EIF V2.0 release candidate 2: " 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."

This continuous task will be done in ensuring 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	Strategic alignment between interoperability activities and EU policies, coherence of interoperability actions within the Commission

5.2.6. ORGANISATIONAL AND TECHNICAL 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.

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.

5.2.7. COSTS AND MILESTONES

5.2.7.1.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)
		1.200	ISA	Q3/2010	Q4/2015
	Total	1.200			

5.2.7.2.Breakdown of ISA funding per budget year

Budget Year	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2010	200	205
2011	200	
2012	200	
2013	200	
2014	200	
2015	200	

6. ANNEX I: LIST OF ABBREVIATIONS AND ACRONYMS

- Ares - tool under the e-Domec policy for the registration and filing of documents
- 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
- CIRCABC - Communication and Information Resource Centre for Administrations, Businesses and Citizens
- EDI - Electronic Data Interchange
- e-Domec - policy for Electronic archiving and Document Management in the European Commission
- 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
- IDABC - Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens
- ITIL - Information Technology Infrastructure Library - best practices for IT Service Management
- 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 eProcurement On-Line
- 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
- UN/CEFACT - United Nations Centre for Trade Facilitation and Electronic Business
- XML - eXtensible Markup Language