



# **Orientation Document**

# IDABC XML Clearinghouse: SEMIC.EU

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## 1 Introduction

## 1.1 Purpose of the document

The Orientation paper is the first task enlisted within the Technical Annex for Specific Contract no 1 regarding the Global Implementation plan for the IDABC XML Clearinghouse. The purpose of this document is to outline the vision of the IDABC Semantic Interoperability Centre Europe (SEMIC.EU) formerly known as the XML clearinghouse and to give a comprehensive overview of its objectives, planned measures and envisaged results of the SEMIC.EU project that will be established by the IDABC programme of the European Commission. The document also provides a detailed plan of how the project will be implemented in particular on the project planning and the technical set-up together with an update and enhancement to earlier studies on the topic. As a result this paper will continue to build on the current Global Implementation Plan (GIP) for the project.

SEMIC.EU is to become the pan-European platform and repository that allows public administrations and other stakeholders to exchange information, experiences and assets that concern semantic interoperability in eGovernment to support the establishment of cross-border services.

The preliminary studies foreseen for the feasibility phase of IDABC project and the public call for tender producing framework contract ENTR/05/086 – Content Interoperability Technologies have been successfully completed.

#### 1.2 References

This Orientation Document is based on or refers to the following documents:

Document	Version	Date	Authors
Orientation Document: Required Actions for the Implementation of an XML Clearinghouse for pan-European eGovernment Services	1.0 (Draft)	01/2006	IDABC / BAH
IDABC Semantic Interoperability Strategy: The European XML Clearinghouse Feasibility Study <sup>1</sup>		12/2005	IDABC / AM2 Systems / Sopra
IDABC Content Interoperability Strategy Working Paper <sup>2</sup>		11/2005	IDABC / AM2 Systems / Valoris
European Interoperability Framework for pan- European eGovernment Services (EIF) <sup>3</sup>	1.0	2004	IDABC

#### 2 Rationale

European public administrations face the complex task of implementing more and more pan-European eGovernment services not only as part of the transformation process within their administrations with the aim to achieve cost-savings, better customer service and increase efficiency, but also because it is part of the legal requirements. Seamless data interchange is one of the most important prerequisites in

<sup>&</sup>lt;sup>1</sup> http://ec.europa.eu/idabc/servlets/Doc?id=24406

<sup>&</sup>lt;sup>2</sup> http://ec.europa.eu/idabc/servlets/Doc?id=24405

<sup>&</sup>lt;sup>3</sup> http://ec.europa.eu/idabc/servlets/Doc?id=19528

order to develop efficient pan-European eGovernment services. This is due to the fact that data interchange between different data systems, facilitate the implementation of easy-to-use cross-border eGovernment services and applications across the EU at large, or within its Member States. Apart from the technical dimension, questions of semantic and organisational interoperability have to be solved.

The <u>IDABC programme</u><sup>4</sup> of the European Commission addresses the challenges of interoperability in all dimensions. The IDABC decision (2004/387/EC) was based on the <u>eEurope Action Plan</u><sup>5</sup> and in accordance with the i2010 Initiative. This decision sets the framework for the common principles and rules on open standards and interfaces for the implementation of interoperability between systems, applications, business processes and actors producing or using eGovernment services. But even this network-based approach requires a big effort to define rules of collaboration, coordination of processes, formats and specifications as well as instances acting as brokers between systems.

The role of IDABC is therefore not limited to the production of guidelines but it also entails planning and implementing infrastructures to support interoperability. Among other tasks, it is IDABC's explicit mission to promote reuse and harmonisation of data formats and semantic assets within the European Community<sup>6</sup>. This can be achieved by providing interoperability assets (e.g. XML schema, thesauri, taxonomies) which can be used in data exchange by cross-border projects.

Hence, the SEMIC.EU project, incorporating previous work and implementing further measures, covers a central area of IDABC's mission, for it has the following objectives.

- Building a repository for interoperability assets
   The repository will offer the possibility of easily up- and downloading interoperability assets
   (e. g. XML schemas, code lists, classification schemes, taxonomies, etc.).
- Providing high quality interoperability assets The quality of published interoperability assets is a major success factor for successfully reusing interoperability assets. The SEMIC.EU project will therefore draft quality policies for interoperability assets. It will also assure that interoperability assets published in the SEMIC.EU repository conform to these quality policies.
- Providing coaching services for creators and users of interoperability assets Due to the high complexity of the field, users may require coaching services in order to successfully create and/or reuse interoperability assets. Such services will be advertised via the SEMIC.EU platform and provided as part of the SEMIC.EU project.
- Establishing expert communities In order to learn from past projects and to create synergies the SEMIC.EU project will work towards the creation of active expert communities. These communities will largely consist of sectoral experts. They will deal with the specific issues of semantic interoperability in their respective sectors. If successfully established, these communities will be able to continue some of the work done by the SEMIC.EU project.

## **3** Current situation

The IDABC predecessor programmes IDA and IDA II have already laid the ground for strategic guidance on semantic interoperability. Published in autumn 2004, the European Interoperability Framework for pan-European eGovernment Services (EIF v 1.0) provides high level guidance to EU institutions and Member States and serves as the umbrella for a federated set of "interoperability guidelines" to be developed by IDABC.

<sup>5</sup> http://ec.europa.eu/idabc/en/document/70

<sup>&</sup>lt;sup>4</sup> http://europa.eu.int/idabc/

<sup>&</sup>lt;sup>6</sup> see annex of decision 2004/387/EC

In January 2005, a project – "Developing Content Interoperability Strategy: A Feasibility Study on an XML-Clearinghouse for pan-European eServices" – was launched, in order to provide both a "Working Paper on Semantic Interoperability Strategy" giving strategic advice, as well as a first step towards the implementation of a supporting platform, the "European XML-Clearinghouse Feasibility Study". The Working Paper was designed to outline an IDABC strategy and to serve as base of discussion on further steps with the IDABC community in both the Commission and the Member States.

The research conducted in the context of the Working Paper has identified a series of cross-border projects at the European level already relying on interoperability assets and others, which potentially would benefit from using such assets. Experts in industry and public administrations agree that semantic interoperability based on XML-technologies has a huge potential in the context of international data exchange and will be around for many years to come. Although there are several standardisation initiatives at the European level (e.g. CEN eGov Focus Group, CEN/ISSS eGovernment Taxonomies project) and several national XML-collaboration platforms have emerged, there is not yet an initiative to install a platform and broker for pan-European assets. SEMIC.EU will be developed to address this shortcoming. It will gather information and supplement national and sectoral asset repositories and initiatives.

The XML Clearinghouse Feasibility Study has already assessed the requirements and resources needed for the recommended European information and collaboration platform. It also provides a concept for the project and a general outline for the work plan. The present work and the GIP rely on the definitions of semantic and syntactic interoperability that were produced by the Working Paper and Feasibility Study. The SEMIC.EU project builds upon this work. In addition, it will re-evaluate certain aspects, taking into account recent developments in standardisation, software development and needs of stakeholders that arose after the conclusion of the preparatory studies.

# 4 Proposed approach

The approach proposed by the SEMIC.EU project team will be described in the following sections. First, the fundamental principles of the project will be described, followed by the project's main objectives. Finally the measures and actions undertaken by the project will be detailed.

#### 4.1 Project principles

The following three underlying principles govern all actions of the SEMIC.EU project. They follow directly from the IDABC's mission and policies.

#### 4.1.1 Living openness and transparency

SEMIC.EU's success will be based on acceptance of the stakeholders who recognise an added value in using SEMIC.EU and who trust in the quality of its services. Open, transparent and well-documented decision making processes in the context of SEMIC.EU are paramount for creating this acceptance and trust. Furthermore the SEMIC.EU project will rely on Open Source Software and open standards wherever possible.

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<sup>&</sup>lt;sup>7</sup> http://ec.europa.eu/idabc/servlets/Doc?id=24405

<sup>&</sup>lt;sup>8</sup> http://ec.europa.eu/idabc/servlets/Doc?id=24406

## 4.1.2 Interoperability over standardization

Interoperability<sup>9</sup> can be realised in many different ways. It is possible to achieve a certain degree of interoperability without the need for a single information standard by fostering bilateral and multilateral solutions and suitable mappings.

In other fields of standardisation, the situation is quite similar. There are for instance multiple national standards for electric plugs in the EU. However, given a set of adapters it is still possible to ensure interoperability. The same can be true for data exchange. As long as data can be exchanged in a meaningful way between all relevant communication partners, an agreement on a unified standard is not necessary. It is even possible to agree on the exchange of incomplete or inconsistent information. As long as all communication partners are aware of the consequences, this does not contradict the idea of interoperability.

Creating a standard on the other hand requires a unanimous agreement of all partners involved. In order to receive the necessary acceptance standards have to be created and enforced by an institution with ample authority. Given the several different economic, legal and cultural backgrounds of the Member States, achieving interoperability without standards is the most efficient solution. SEMIC.EU will promote and encourage standardisation and harmonisation efforts, but its main focus will be ensuring interoperability in the best way possible.

# 4.1.3 Multilingualism

In the EU with its 27 Member States and 23 official languages multilingualism has obviously become a major challenge. The SEMIC.EU project is aware of the situation and will address it by making the discovery and dissemination of multilingual assets one of its priorities. In addition, an in-depth study will be conducted illuminating possible approaches and possibilities.

With these actions SEMIC.EU endeavours to lay the foundations for future actions in this highly complex field.

# 4.2 Project goals

With the underlying principles in mind the goals of SEMIC.EU can be grouped into four fields presented in this section. Every measure undertaken in the project will serve at least one of these goals.

## 4.2.1 Serving as single point of contact for semantic interoperability

Multiple efforts have been undertaken by Commission services and Member States alike in the field of syntactic and semantic interoperability that have produced interoperability assets in many different policy areas. The SEMIC.EU project is set up to collect and display the existing activities and give the related projects a common space for interaction by establishing a single point of contact for semantic interoperability in Europe.

As a single point of contact SEMIC.EU intends to supplement national and sectoral initiatives in the field. The SEMIC.EU platform will be used to collect and display information from various sources and to provide a common forum for experts.

## 4.2.2 Bringing semantic interoperability to life

The basis for future actions in the field of semantic interoperability in eGovernment has already been laid by projects in sectors and Member States and has partly been supported by horizontal measures of IDABC. Building on this basis, the project now aims at "putting theory into practice".

<sup>&</sup>lt;sup>9</sup> The EIF defines interoperability as the ability of information and communication technology (ICT) systems and of the business processes they support to exchange data and to enable the sharing of information and knowledge.

In order to do this and to bring interoperability to life, SEMIC.EU aims to provide practical guidance for eGovernment projects. Thus SEMIC.EU will provide a wide range of guidance, coaching and consulting services for eGovernment projects dealing with semantic interoperability.

# 4.2.3 Creating synergies among stakeholders

Many pan-European eGovernment projects have already tackled issues of semantic interoperability, but up to now the approach used to reach interoperability in these projects is seldom used beyond the scope of their original project. SEMIC.EU intends to promote the reuse of such approach to create synergies among stakeholders.

Thus SEMIC.EU will thrive to

- identify common elements across projects, sectors and Member States, and initiate discussions and activities leading to harmonisation,
- encourage stakeholders in semantic interoperability to agree on methodologies, standards and common rules for creating and documenting assets,
- encourage projects to share assets they have created or that they are owning,
- encourage others to reuse existing assets and possibly modify and share them again,
- encourage owners of semantic and syntactic assets that are not yet electronically available to make them available based on state-of-the-art standards,
- encourage projects and initiatives working in similar areas to join their efforts at an early state and work together on common specifications for their assets.

Where specific interoperability assets cannot be reused, SEMIC.EU will encourage agreement on a common set of methodologies, standards and tools. This will ease the interoperability issues significantly. Establishing early communication between partners, sharing experiences and the building of competence networks, will also facilitate the implementation of new projects.

Furthermore, the SEMIC.EU project team will actively approach promising initiatives and support stakeholders that are willing to take responsibility in standardisation or harmonisation initiatives. The SEMIC.EU project team will also become active, in linking existing national and sectoral initiatives.

#### 4.2.4 Ensuring user involvement

A strong involvement of users is one of the key success factors for SEMIC.EU, since the diversity and quality of its content will dependent on the contributions of third parties. Stakeholders, e. g. potential users and contributors will therefore be involved from the very start of the project.

Involvement of users will start with communicating the benefits users can get from using the SEMIC.EU platform, such as increasing project visibility, using guidance and coaching provided by the SEMIC.EU project team, drawing on experience from other project on the competence network, etc. The SEMIC.EU project team will thrive to stay in continuous communication with the users and contributors of the platform. Feedback and requirements from users and contributors will be collected during the entire run of the project in order to improve SEMIC.EU's services.

A critical step will be the organisation and formalisation of the user involvement in the publishing workflow and in the "clearing process" for interoperability assets. Since SEMIC.EU does not have the legitimisation to "clear" assets other than on a purely formal level, the clearing process for "accepted" and "recommended" assets will have to be supported by experts that are officially nominated by the Member States. The IDABC XML-Clearinghouse feasibility study has already proposed a concept for this process that will serve as the basis for further consultation with stakeholders. The details of implementation and the resources that are needed will have to be discussed with Member States, once the project is operational.

In addition acceptance and usage of different services of the SEMIC.EU platform will constantly be monitored using statistical and analytical tools. The input will also be used to improve SEMIC.EU's services.

# 4.3 Project structure

The work on the project is internally structured into four fields of work to address the goals mentioned above. These project streams are strongly interdependent as shown in the figure 1.

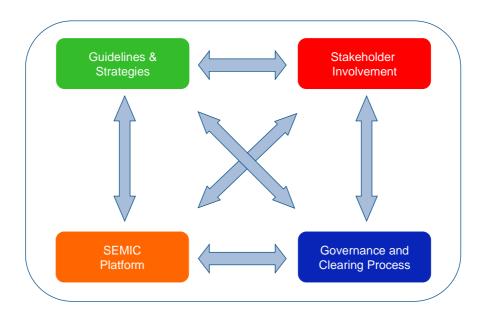


Figure 1: Fields of Work

The first field of work includes the development of common principles (on IPR, access, quality, documentation, multilingualism etc.) as a basis for the operation of SEMIC.EU. All guidelines and strategies will be published on the SEMIC.EU platform. Over time the number of guidelines will increase and cover more and more topics in semantic interoperability.

The second field of work encompasses all networking activities among the project stakeholders. This includes contacting possible contributors and users and motivating them to take an active role in the project. It also entails thematic workshops and meetings to create synergies between different stakeholders as well as the organisation of semantic interoperability events for a broader eGovernment audience. The provision of information for stakeholders on the SEMIC.EU website and via other media also belongs to track of the project.

The third field of work includes all activities concerning the governance of SEMIC.EU and in particular the organisation of publishing and clearing processes.

The final field of work is the technical implementation, deployment, and operation of the SEMIC.EU platform, including registries and repositories as well as tools for information, communication, and collaboration.

# 4.3.1 Guidelines & Strategies

The work around the SEMIC.EU platform has to rely on certain principles and rules. Thus guidelines and strategies will be prepared drawing on the experiences stemming from other initiatives already active in the field of semantic interoperability.

The preparation of guidelines and strategies will always follow the same general workflow. It begins with discussion of the subject in the project team and with stakeholders, e. g. project leaders, other existing repository initiatives etc. Based on this preparatory work the SEMIC.EU project team will propose a written document that will be presented in the IDABC Interoperability Expert Group and published on SEMIC.EU if approved. This may be done in the form of document downloads as well as FAQs, Online Help, etc. During the course of the project all documents will be part of an iterative improvement and updating process.

In order to successfully start the SEMIC.EU platform, a licence policy will have to be determined. For users willing to contribute to SEMIC.EU it will be essential to know how IPR issues are handled by SEMIC.EU. A single open licence, e. g. based on the EUPL would be preferable, but users and contributors may be allowed to use licences of their own. However underlying licenses of interoperability assets have to be made transparent to the user.

Another policy paper that will be prepared is the quality policy for SEMIC.EU. This policy will make clear to the user which quality standards are expected for interoperability assets that are foreseen to be included into SEMIC.EU.

A very important aspect of the project is multilingualism. The interoperability assets will be provided in a variety of European languages which leads to the problem that interoperability assets must on the one hand be managed by a small, restricted group of developers. On the other hand comments and explanations must be translated into all languages required by a larger group. Additionally, users usually are interested in their own native language version only. Another aspect for users will be to find interoperability assets for a specific domain, even if they are not available in their respective language. Therefore the topic of multilingualism will be a focus of applicative research, to identify all relevant aspects, available research results and solutions, so they can successfully be adopted by SEMIC.EU.

Thus the following guidelines and strategies are among the first to be prepared for the SEMIC.EU project:

- Quality policy for SEMIC.EU
- IPR policy for SEMIC.EU
- Guidelines for producing interoperability assets, including process guidelines for SEMIC.EU
- Study on multilingualism
- Best practices study on existing repositories.

During the preparation of guidelines and strategies as well as during the operation of SEMIC.EU additional subjects will emerge that warrant further investigation. These subjects will be dealt with in ad-hoc studies.

#### 4.3.2 Stakeholder Involvement

The involvement of stakeholders and users will be essential to link together different initiatives, gather project results and finally to create synergies by sharing and reusing interoperability assets.

A systematic assessment and prioritization of stakeholders will be continued throughout the project. Three primary target groups have been identified by categorising the roles prospective users will play within SEMIC.EU: providers, users (of interoperability assets) and disseminators. Members of these groups will have different needs and expectations and should be treated accordingly. However, the groups are not mutually exclusive. One user might easily act as a provider of assets and eventually wish to obtain other available assets.

• The first target group includes potential **providers** of interoperability assets, such as PCIs and bilateral or multilateral projects, willing to contribute interoperability assets to SEMIC.EU.

• The second group will consist of all potential **users** interested in reusing interoperability assets made available through SEMIC.EU. This group of potential recipients of assets will presumably be the largest group. To meet the demands of this group, encouraging providers and disseminators to participate will therefore be of great importance. Only sufficient input can ensure the functioning of SEMIC.EU.

• The third target group includes national initiatives on semantic interoperability including national clearinghouse projects, international standardisation bodies and similar entities. These are entities that will not contribute or reuse interoperability assets of their own but will act as **disseminators**, spreading the news about SEMIC.EU.

A first analysis of possible stakeholders and a stakeholder matrix are presented in section 5 and in the annex.

This classification of roles using SEMIC.EU is complemented by the identification of stakeholders with regard to their background and primary fields of operation. Designing a goal-oriented communication strategy requires customised communication measures for each target group as well as for groups of stakeholders.

Managing contact with stakeholders will include hosting conferences and workshops to present SEMIC.EU to the target audience and to motivate users to contribute. Contact with the stakeholders will also be used to gather information on activities in the field of semantic interoperability.

During the early stages of the project, a group of selected IDABC projects will be invited to contribute as cooperation partners. This core group of up to 15 projects is supposed to collaborate closely with the SEMIC.EU staff. In this early phase, all other stakeholders will mainly be addressed via the website and newsletters.

A Communications Manager will be nominated in order to coordinate all efforts in this field. The manager will act as a contact person for all stakeholders and users of SEMIC.EU. The Communications Manager will work closely with the Clearing Process Manager as soon as technical and editorial questions are concerned.

Another activity in this field is the development of partnerships with similar projects from EU countries. A few Member States have already established clearinghouses / repositories similar to SEMIC.EU or are in the process of establishing them. Close collaboration may lead to the exchange of interoperability assets. Special interest should be paid to the activities in France and Germany since both repositories are run on the same technical basis that will be used for SEMIC.EU.

In order to involve the experts from IDABC's Interoperability Expert Group it has been suggested to create an advisory group dedicated to the SEMIC.EU project. The new members of this advisory group should be invited by the PEGSCO. They will be introduced to the SEMIC.EU project in a dedicated workshop. The workshop should be held early in 2008.

#### 4.3.3 Governance and clearing process

Contributions to SEMIC.EU shall be governed by open and transparent clearing and publishing processes.

The clearing process proposed will consist of three steps:

- Asset Collection: Assets uploaded to SEMIC.EU will first be checked for consistency. After
  this check they are entered into the Asset Collection. Once assets have entered the collection
  stage, they are available for download by users of SEMIC.EU.
- Asset Catalogue: After a successful quality check assets from the Asset Collection will be promoted to the Asset Catalogue.
- Certification: Assets from the Catalogue may be subjected to a certification process. The result will be a certified asset that is specially recommended for reuse by SEMIC.EU.

Asset
Collection

Quality Assurance

Catalogue

Certification Process

Certified
Assets

The following chart outlines the proposed clearing process:

Figure 2: Clearing Process

The details of the clearing process will be devised as part of the field of work "Guidelines and Studies" based on experiences with similar processes. The following roles and responsibilities will, most likely, be part of this future process:

- **Provider** provide assets, provide documentation, maintain assets, and answer questions arising from the clearing process
- Clearing Process Manager manage the clearing process, assure the quality of assets, and identify potential for the refinement of assets
- **Community** provide implementations and reuse for assets, provide feedback from implementation and reuse, provide input for the clearing process
- **Expert groups** provide expert knowledge for the certification process.

The detailed definitions and descriptions for the roles and responsibilities will be devised early during the course of the project.

In addition to his responsibilities in the clearing process, the Clearing Process Manager will head all actions in this field of work. He will be the single point of contact for providers and users. The Clearing Process Manager will work in close contact with the asset providers during all stages of the clearing process.

The role of the Clearing Process Manager will be pivotal at least before an active community can manage the exchange and refinement of assets largely on its own. Given the experience with other national initiatives, it will take quite some time to establish such a working community. This is also why stakeholder involvement is given such a high priority during the course of this project.

In order to get the processes working it will be necessary to offer coaching services to potential providers and users. During the start up phase these coaching services will account for the largest part of the work done in this field. Once the processes have been well established and a community has organised itself, the focus in this field of work will shift from coaching to the actual governance of the clearing process.

# 4.3.4 SEMIC.EU platform

All future activities of IDABC in the field of semantic interoperability will be concentrated and published under the title "Semantic Interoperability Centre Europe (SEMIC.EU)". The corresponding online platform shall be publicly accessible under the domain name "semic.eu".

The SEMIC.EU platform is designed to be more than a repository for interoperability assets and will support all actions of the project. For the implementers of pan-European eGovernment services, whose projects rely on seamless data exchange, SEMIC.EU will therefore be an important and versatile platform. As a single point of contact SEMIC.EU will provide several services to its users:

- As an online information platform it will thrive to become the main source of information and guidance on semantic interoperability for European eGovernment projects. SEMIC.EU will provide implementers with extensive information on the subject of semantic interoperability, including background information, SEMIC.EU policies and guidelines that are prepared as part of the "Guidelines and Strategies" field of work.
- SEMIC.EU will allow its users to share experiences and learn from best practices. This will be achieved by providing interactive functionalities such as newsletter, forums, blogs, etc., allowing an active community to form. These functions will support and supplement the actions of the "Stakeholder Involvement" field of work.
- Furthermore SEMIC.EU will provide collaboration functionalities and consultancy support for the exchange and harmonisation of interoperability assets. A repository and registry solution will allow search and retrieval of interoperability assets across Europe. It will also allow uploading of assets by contributors to SEMIC.EU wanting to increase the visibility of their products. Reusing interoperability assets will decrease the number of different solutions used in projects and thus effectively bring about some degree of harmonisation and increased interoperability.

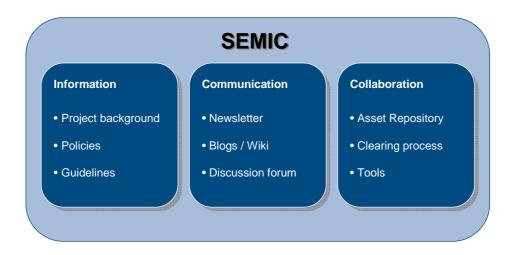


Figure 3: Services of SEMIC.EU platform

Although the SEMIC.EU platform is intended to be as open and transparent as possible, it will also provide the possibility of closed user groups. These groups can be used to restrict the clearing process to a closed group or to exchange interoperability assets that should not be available for public use.

# 5 Stakeholders and target groups

As pointed out in section 4.3.2, potential users of SEMIC.EU can be classified into three different target groups: providers, users and disseminators. This categorisation into target groups helps to address individual needs, which may differ for a group of people within the same organisation.

Besides this categorization, users will have very different backgrounds. Thus a second categorization is appropriate. This will allow classifying users into different stakeholder groups, like pan-European projects, national initiatives, etc. The categorisation into different stakeholder groups is mainly based on the organisational character of the different initiatives and projects.

The classification into both stakeholder groups and target groups leads to a matrix. The matrix shows for every potential SEMIC.EU user, i. e. stakeholder, the stakeholder group he belongs to and the target group he is expected to belong to. The structure of the matrix is shown as an example in Figure 4. The completed stakeholder matrix will be provided once contact with stakeholders has been intensified.

Evaluating the matrix allows customising communication with regard to the respective focus of groups/individuals and their field of operation.

# Target groups

	Provider	User	Disseminator
DASC projects			
Α	×	x	X
В	x	X	X
С	x	X	X
Other EU projecto			
A	x	X	
В	×		×
С		x	X
HS hitsino			
А	x	X	
В		X	
C	х	X	
MS belieber			
А		X	
В		×	×
С	x	X	
Sectoral initiations			
А	x		
В	х		
С	x		×

Figure 4: Structure of Stakeholder/Target Group Matrix (example)

As a result of the assessment the following stakeholder groups have been identified:

**IDABC projects**, regardless of their outcome in terms of reusable assets, are a key group of stakeholders. However, not only projects linked to IDABC can be of use but also those outside the IDABC programme, especially those with a pan-European character. For similar reasons, European Commission services and agencies must be counted among the stakeholders for SEMIC.EU. The same applies for other pan-European institutions and bodies like the European Central Bank.

**National platforms, clearinghouses and initiatives** in EU Member States are also of great importance. It is one aim of SEMIC.EU to coordinate these efforts and to make them usable for other national, multilateral and pan-European actors. This stakeholder category is not restricted to EU Member States. Other national initiatives may prove useful as both resources and good practice cases.

**International initiatives** like UN/CEFACT will be another main source of input. They can deliver ideas for procedures and fields of work to be addressed.

Since eGovernment ventures are not organised uniformly in EU Member States, a crucial part of stakeholder management will be the identification of and communication with national eGovernment actors. This stakeholder category clearly represents all three of SEMIC.EU's target groups since those involved in national eGovernment management and development can be providers and users of interoperability assets as well as disseminators.

In order not to omit projects outside general European frameworks, it will take additional effort to capture initiatives in specific sectors. In certain cases, advanced interoperability assets might already exist which can be made available for use in other contexts.

International standardisation bodies should also get involved in the process and the operation of SEMIC.EU. Especially where ontologies, mapping tables and existing standards are needed, their contribution will be highly valuable.

As outlined in the IDABC working paper, businesses and IT providers will be able to use the SEMIC.EU as a source of information about ongoing initiatives and technology decisions at the European level. It might eventually evolve into a platform for exchange on connections between businesses and administrations and for agreements on shared specifications.

Once SEMIC.EU is in full operation, adjustments in stakeholder involvement can be made according to the analysis of target groups. This can be carried out along the information represented in a stakeholder/target group matrix. A list of stakeholders identified so far can be found in the Annex to this document.

#### 6 Link with other horizontal actions

This action has links to other interoperability activities described in the IDABC Content Interoperability Strategy Working Paper.

- The revision of the European Interoperability Framework for pan-European eGovernment Services as a lead document of the IDABC federated interoperability guidelines.
- The development of the Working Paper on Semantic Interoperability Strategy into an IDABC Guideline.
- The revision of the IDABC Architecture Guidelines.

# 7 Project plan

#### 7.1 Schedule

The overall schedule for the project is planned from January 2008 until December 2009.

The project realisation will be structured into the four main fields of work outlined in section 4.3: guidelines & strategies, stakeholder involvement, governance and clearing process and the SEMIC.EU platform. The initial launch of the SEMIC.EU platform is scheduled for June 2008. A rough breakdown of the four fields of work is outlined in the chart below. A detailed project plan is to be found as a Gantt diagram in the Annex to this document.

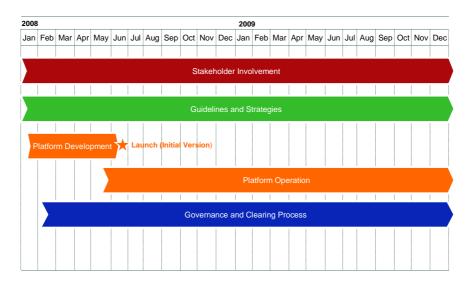


Figure 5: Schedule Fields of Work

The **guidelines and strategies** field of work will produce all necessary documents for the development and governance of the SEMIC.EU platform. These documents include a specification of the clearing process, policies for interoperability assets as well as practical guidelines for the development of these assets. Most of the documents will be developed during the first months of the project and be updated regularly.

In the context of the **stakeholder involvement** stream, the SEMIC.EU project team will catch up with the stakeholder communication that has already been started during the GIP. Communication measures will accompany the project consistently until the end.

The **governance and clearing process** will start parallel to the system development. The objective is to gather a starting package of high quality interoperability assets for the initial launch of SEMIC.EU. After the going live the Clearing Process Manager will administrate the clearing process until the end of the project.

The **platform development** will start when the basic requirements for the clearing process are defined. The initial version of the repository will be released in May 2008. After the launch a user survey will be carried out in order to gather first hand feedback about the system. This feedback is an important source of information for the further development of the platform. The system operation will start after the system set up at the end of the development phase and last until the project closure.

To ensure a long term project profit, it is strongly recommended to continue SEMIC.EU operation after 2009, a point that has already been made in the Feasibility Study.

#### 7.2 Resources

The expected allocation of resources is depicted in the following chart.

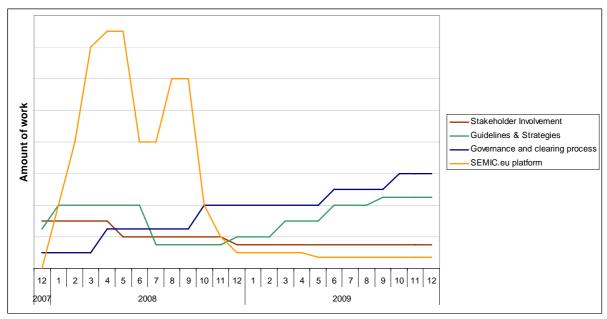


Figure 6: Resource allocation

In addition to these resources, involvement from the IDABC project team is necessary for the following tasks:

- Review of project deliverables
- Decisions on strategic and operational project issues
- Provision of contacts to EU stakeholders
- Content production for the portal

# **8** Constraints

# 8.1 Political constraints

Any additional work needs full political commitment from Commission services and from Member States; endorsement of PEGSCO.

#### **8.2** Technical constraints

At the moment no technical constraints are foreseeable.

#### **8.3** Other constraints

The success of SEMIC.EU does not only depend on the factors mentioned above but also on the long-term sustainability of its operational services. It would be much harder to motivate stakeholders and users to contribute to SEMIC.EU if the lasting effect of the contribution was in question.

As a consequence, the continued operation of SEMIC.EU should be ensured well before the end of the project and the IDABC programme.

# 9 Conclusions

The IDABC Feasibility Study has shown that the creation of a pan-European Interoperability Clearinghouse is realistic and can considerably facilitate addressing content interoperability issues

encountered in future Projects of Common Interest and future pan-European eGovernment Services projects.

The theoretical basis has been laid by the Working Paper and the Feasibility Study to take action. With the measures described above it will now be possible to successfully start SEMIC.EU and motivate stakeholders and users to contribute to it and use it. Consequently, profits from the increased interoperability provided by the reuse of interoperability assets will be generated.

# **GLOSSARY**

Term	Definition		
CEN	European Committee for Standardization, see www.cen.eu		
ebXML	ebXML (Electronic Business using eXtensible Markup Language), see <a href="https://www.ebxml.org">www.ebxml.org</a>		
EIF	European Interoperability Framework		
EUPL	European Union Public Licence		
GIP	Global Implementation Plan		
H(A)M	Horizontal (Actions) and Measures from IDABC		
IPR	Intellectual Property Rights		
OASIS	Organization for the Advancement of Structured Information Standards; see <a href="https://www.oasis-open.org">www.oasis-open.org</a>		
OASIS/ebXML Registry Information Model	Standard for metadata registries		
OASIS/ebXML Registry Services Specification	Standard for metadata registries		
PCI	Projects of Common Interest; sectoral projects in the context of the IDA and IDABC Programmes		
PEGSCO	Pan-European eGovernment Services Committee		
SEMIC.EU	Semantic Interoperability Centre Europe		
TWG	Technical Working Group of the PEGSCO		
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business, see <a href="https://www.unece.org/cefact/">www.unece.org/cefact/</a>		