iGOV: Interoperable EU eGovernment Framework

for CIP PSP Programme
Objective 1.3 Innovative solutions for inclusive and efficient eGovernment
a) Mutual recognition and interoperability of electronic documents

Abstract

The iGOV Project will deploy an open source platform and technology independent eGovernment Framework that connects already existing eGovernment services in the EU Member States and the Associated Countries. There are already eGovernment initiatives in the individual EU Member States and Associated Countries. Each of these initiatives has different electronic document format and different transport protocols to exchange electronic documents. In this respect, in order to deploy an EU eGovernment Framework, two main challenges have to be overcome: (1) interoperability of the documents and (2) interoperability of the transport protocol.

For addressing the first challenge, the iGOV Project will use Universal Business Language (UBL)[i], which is an OASIS standard to develop common business document schemas to provide document interoperability in the electronic business domain. UBL is already being adapted by several communities around the world. Examples include Denmark, where UBL Invoice has been mandated by law for all public-sector businesses[ii]; Sweden, where the National Financial Management Authority recommended UBL Invoice for all government use[iii], US Department of Transportation which is developing a UBL based pilot project for a demonstration of state-of-the-art electronic commerce in a real-world setting[iv].

In the iGOV Project, the UBL document set, called EU UBL eGovernment Core Document Set, to be used in the iGOV EU eGovernment Framework will be identified. This core document set will include the common information components specific to eGovernment operations throughout the EU. It should be noted that each Member State or Associated Country has different information requirements. Therefore, the core UBL document set should be tailored for each Member State or Associated Country according to its requirement. When these Member States using different customizations wish to communicate in the iGOV Framework, there is a need to translate their schemas to each other. For this purpose, in the iGOV Framework semantics-based translation mechanisms will be used[v].

For addressing the second challenge, the iGOV Project's architecture will be based on ebXML[vi] and Web Services. In the iGOV architecture, each Member State or Associated Country will identify their required eGovernment Services and expose them as Web Services. For this purpose, the iGOV Project will provide necessary Legacy Application Integration Tools that helps the user to wrap their existing legacy application as Web Services. For process level interoperability, they will also describe their eGovernment processes, which will use these Web Services, through ebXML Business Process Specification Schema. Additionally, in some cases some of the eGovernment documents should be archived because of the legal issues. In this respect, the iGOV Project will provide distributed document repositories based on ebXML Registry/Repository Architecture. For facilitating the discovery of the documents, semantics mechanisms will be used[vii].

The iGOV Project will provide:

- An agreed iGOV secure framework for authenticated electronic eGovernment documents across the EU. The documents may include text, picture, audio, and video content;
- Electronic ebXML Registry/Repository based archives to store documents to fulfill specific legal obligations;
- eServices to interoperate across the EU, through identifiable and authenticated official electronic documents;
- Openly available electronic document schema specifications for interoperability

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