Factsheet Bulgaria

Main interoperability activities

The latest version of the Bulgarian National Interoperability Framework (NIF) for governmental information systems dates from June 2006. No release date for a next version has been provided.

Next to the NIF, Bulgaria put forward the following law and ordinance to support interoperability: the 'law on electronic governance' and the 'Ordinance on the general requirements for interoperability and information security'.
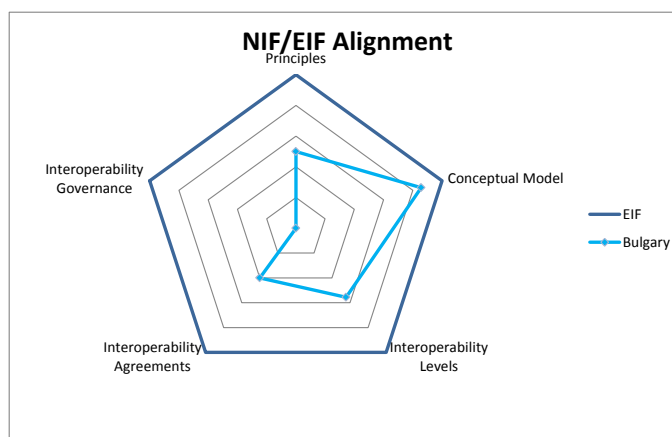
Summary of the NIF

The Bulgarian NIF is built around seven basic principles. Principle 1 requires the usage of open internationally adopted standards. Principle 2 recognises Service Oriented Architecture (SOA) as a basis for building governmental information systems. Principle 3 requires all services to be realised as transactions of formalised information objects. Principle 4 requires data of citizens and business to be gathered only once and shared among appropriate e-Service providers. Principle 5 requires an integration (intermediary) environment to ensure a common interface for the information exchange between different governmental units, citizens and businesses. Principle 6 requires the security aspects for intersystem information exchange. Principle 7 requires conformity testing of the standards for interoperability through assessment procedures.

For the practical application of the NIF, the following actions are defined:

- The NIF has to be an integral part of the eGovernment strategy;
- It is necessary to establish and ensure the maintenance of the centralised registries;
- An instructions manual for the order and the conditions of the optional NIF conformance certification needs to be adopted;
- The creation and exploitation of basic components.

Alignment NIF/EIF

The Bulgarian NIF is strongly aligned with the EIF on the 'conceptual model'and the'interoperability levels'. The 'interoperability agreements'and the 'Principles' are fairly aligned with EIF and no framework for interoperability governance was observed.

The Bulgarian NIF aligns with half of the EIF **principles**. These six principles are: user-centricity, inclusion and accessibility, security and privacy, multilingualism, preservation of information and technological neutrality and adaptability. The Bulgarian NIF adds to this the following two principles: multi-lateral relations and priority to the decentralised responsibility.

The Bulgarian NIF puts forward the **classical reference model** for open distributed processing (international standard ISO/IEC 1076 : 1998), which defines the infrastructure for distributed processing of information between heterogeneous technological resources and multiple organizational domains. Service Oriented Architecture (SOA) is accepted as the basis for building of the information systems within the governmental information systems. In order to ensure a common interface in the information exchange must be realised through "integration (intermediary) environment". The single entry of the data and their multiple uses as well as the semantic interoperability between the various applied systems of the e-Government is realised through the Register of the information objects. Evidences of an infrastructure to interconnect loosely coupled service components were not observed.

The **interoperability levels** described in the NIF are fairly aligned with the ones described by the EIF. The Bulgarian NIF does not describe the interoperability level 'legal' as such but provides a law of electronic governance and an ordinance on the general requirements for interoperability and information security. No observations could be made regarding the business processes and organisational relationships. Semantic interoperability is based on resources providing morphological compatibility (a.o. nomenclatures, thesauruses, ontologies) and on resources providing syntactical compatibility (a.o. XML-schemes, models and schemes of metadata). Technical interoperability is distributed on standards, methods, architecture, etc.

The **interoperability agreements** described in the NIF are fairly aligned with the ones described by the EIF. Standards are selected and updated, by formalised criteria, by a double-unit. No agreements on minimum service requirements for secure data exchange could be observed.

The existence of a **governance** framework to control the interoperability activities across administrative levels has not been observed.

Other initiatives on interoperability

Law on electronic governance: This law lays down the activity of the administrative bodies related to work with electronic documents, provision of administrative services electronically and exchange of electronic documents between the administrative bodies.

Ordinance on the general requirements for interoperability and information security: The Ordinance provides:

- the general requirements for interoperability and network and information security,
- the keeping, storage and the access to the Register of the standards, and
- the methods for assessing the conformity to the requirements for interoperability and network and information.

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