

Factsheet Denmark

Main interoperability activities

The main reference point for the Danish NIF is the online collaboration platform, Digitaliser.dk. Multiple NIF related documents are stored on this platform: e.g. catalogues of XML interface definitions¹, PSI data sources, recommendations on standards and open source software projects. Besides this, Denmark has taken on board the concept of interoperability in specifications to be followed when developing IT architecture and standards (Cross-Government cooperation).

Summary of the NIF

Denmark puts forward the online collaboration platform **Digitaliser.dk** as main reference point for a Danish NIF. This platform contains catalogues of XML interface definitions, PSI data sources, recommendations on standards and open source software projects.

The **Danish eGovernment Digital Strategy 2011-2015**² aims to accelerate the adoption of digital solutions in the public sector. The strategy is divided in three main tracks. Each track covers various areas and targets different groups. In the first track the goal is to have no more printed forms or letters. The second track wants to achieve new digital welfare. The third track is about digital solutions for closer collaboration. This strategy has a practical approach to interoperability.

The **OIO architecture**³ is a common framework for public sector IT solutions. The OIO architecture methodology defines a series of activities, steps and deliverables. For each step the objectives, actors, inputs, outputs, methodology, sample, tips and links are described.

Denmark puts forward a number of public services and building blocks. The public services are accessible through the **Borger.dk portal**⁴. The building blocks include amongst others user management and Single Sign On (SSO), eID and eProcurement.

A **Steering Committee for Joint Public Cooperation (STS)**⁵ has been established to ensure coordination and to prepare common framework decisions on the development of public sector digitisation.

¹ <http://digitaliser.dk/kataloger>

² http://www.digst.dk/Digitaliseringsstrategi/~/_media/Digitaliseringsstrategi/Tilgaengeligt_engelsk_strategi.ashx

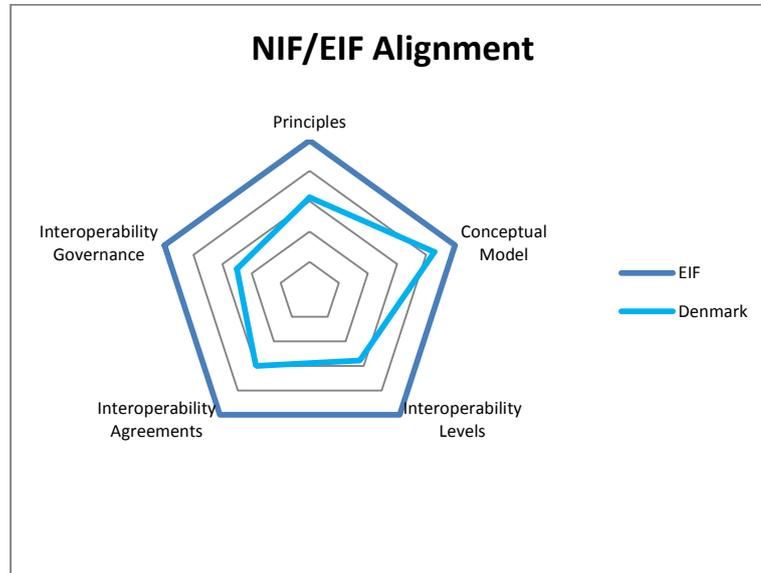
³ <http://www.digst.dk/ServiceMenu/English/IT-Architecture-and-Standards/OIO-architecture-framework>

⁴ <https://www.borger.dk>

⁵ <http://www.digst.dk/Loesninger-og-infrastruktur/NemLogin/Brugerstyringsprojektet/Baggrund.aspx>

Alignment NIF/EIF

The Danish NIF is well aligned with the EIF on the 'Conceptual Model'. However, on the 'Principles', the 'Interoperability Levels' and the 'Interoperability Agreements' there is partial alignment. There is low alignment with the EIF on 'Interoperability Governance'.



The Danish NIF fully aligns with five of the twelve EIF **principles**. These five principles are: inclusion and accessibility, security and privacy, openness, reusability, and effectiveness and efficiency. The Danish NIF partially aligns with five of the twelve EIF principles. These five principles are: subsidiarity and proportionality, user-centricity, multilingualism, administrative simplification and technological neutrality and adaptability.

A **conceptual model** as such was not observed in the Danish NIF related documents; however FORM⁶ may be seen as reference model. Denmark describes an architecture⁷ based on Service-Oriented architecture principles and puts forward standards for Service-Oriented infrastructure. No common schemes to interconnect loosely coupled service components were observed. Authentic sources are often made mandatory by law and the Digital Strategy 2011-2015 promotes heavily the improvement of these sources. User management (including SSO)⁸ and security standards⁹ are put in place to ensure compliance with security and privacy regulations.

The **interoperability levels** described in the Danish NIF are somewhat aligned with the ones described by the EIF. The Danish NIF does not describe the four interoperability levels as such. The Personal Data Act sets out a series of rules for the processing of personal information to assure sensitive personal information is treated correctly and confidentially. A recent law (June 2012)¹⁰ enforces mandatory self-service and mandatory digital communications. No observations were made regarding the clarification of the

⁶ <http://www.digst.dk/Arkitektur-og-standarder/FORM-og-STORM.aspx>

⁷ <http://www.digst.dk/Arkitektur-og-standarder/It-arkitektur>

⁸ <http://www.digst.dk/Loesninger-og-infrastruktur/NemLogin/Brugerstyringsprojektet>

⁹ <http://www.digst.dk/ServiceMenu/English/IT-Security/Standard-for-information-security>

¹⁰ <https://www.retsinformation.dk/Forms/R0710.aspx?id=142234> (digital communications); <https://www.retsinformation.dk/Forms/R0710.aspx?id=142465>, <https://www.retsinformation.dk/Forms/R0710.aspx?id=142027> (the first wave of mandatory self service areas)

organisational relationships. Semantic interoperability is achieved by defining common taxonomies and other semantic assets. Technical interoperability is achieved through the usage of technical standards¹¹.

The **interoperability agreements** described are partially aligned with the EIF. The Reference Committee on IT Architecture and Standards (OIO Committee)¹² coordinates the public initiatives on standardization and IT architecture, and has representation from most departments as well as from municipalities and regions. The focus of the OIO Committee is on architecture, standards and technical infrastructure including formulation of principles and rules for their use.

The existence of **governance framework** to control the interoperability activities across administrative levels has not been observed. However, the Danish NIF defines a steering committee for Cross-Government Cooperation (STS) to ensure coordination of the public sector digitization.

Other initiatives on interoperability

Future projects have a more practical approach to interoperability. There will be little further framework development.

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¹¹ <http://www.digst.dk/Arkitektur-og-standarder/Standardisering/Tekniske-standarder>

¹² <http://www.digst.dk/ServiceMenu/English/IT-Architecture-and-Standards/Standardisation/Governance.aspx>