

NIFO Factsheet – Iceland

The main online source related to interoperability in Iceland is:

- The National Interoperability Framework: <http://samvirkni.ut.is/>

Main interoperability highlights

Following the public consultation of the Icelandic interoperability framework¹, it is now under the responsibility of ICEPRO ([Icelandic Committee on Trade Procedures and e-Commerce](#) – supervised by the Ministry of Finance and Economic Affairs) to build-up and implement the NIF in Iceland.

Summary of the NIF

The Icelandic NIF puts a clear focus on the technical level of interoperability (translated to the interoperability agreements), semantic and organisational interoperability.

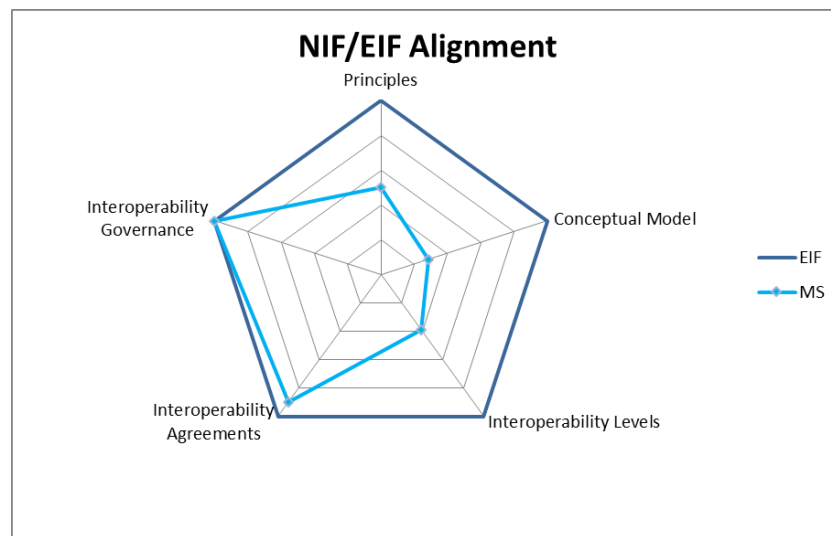
The NIF is not mandatory but highly recommended throughout all layers of government. If a government body decides to use the NIF, it has to do so consistently.

In Iceland several bodies are involved in the implementation of the NIF at all layers of government, as well as ICEPRO and the general public.

Alignment NIF/EIF

Iceland has a medium overall alignment score mostly developed on the Interoperability agreements and the Governance areas.

¹ <http://samvirkni.ut.is/>



The Icelandic NIF is fully aligned with four of the twelve EIF principles; these are subsidiarity and proportionality, user-centricity, security and privacy and openness. Furthermore, Iceland also aligned partially with four other principles being multilingualism, transparency, technological neutrality and adaptability and effectiveness and efficiency.

As regards the conceptual model, the services are foreseen as a component based service model with a large focus on web services. Together with this, several security measures and standards have been defined. And, even though it is not explicitly noted in the NIF, Iceland is working on making authentic sources of information available. Iceland is trying to build the necessary infrastructure and instigate the needed cultural change to support it.

As regards the interoperability levels, Iceland is fully aligned on the encouragement for public administrations to agree on formalised specifications and the change management processes. Even though the focus of the current NIF is on the technical layer, they are putting effort in also describing the other levels of interoperability together with the legislation. Furthermore, Iceland is working on a common taxonomy for public services.

The interoperability agreements are very well aligned since they represent also the technical layer of interoperability. Iceland is actively stimulating the usage of open standards and has a defined process to specify these standards in collaboration with not only standardization bodies but all interested parties of all layers of government and the public.

A high level governance process is defined to guide the NIF development describing the stakeholders and the process to be followed to produce the necessary output. This process may be reviewed in the future since Iceland expects to install a NIF Office.

More detailed information on NIF / EIF alignment is provided on the NIFO Community on JoinUp on the [Compare NIFs](#) page.

Example of alignment – Interoperability Levels: Change Management

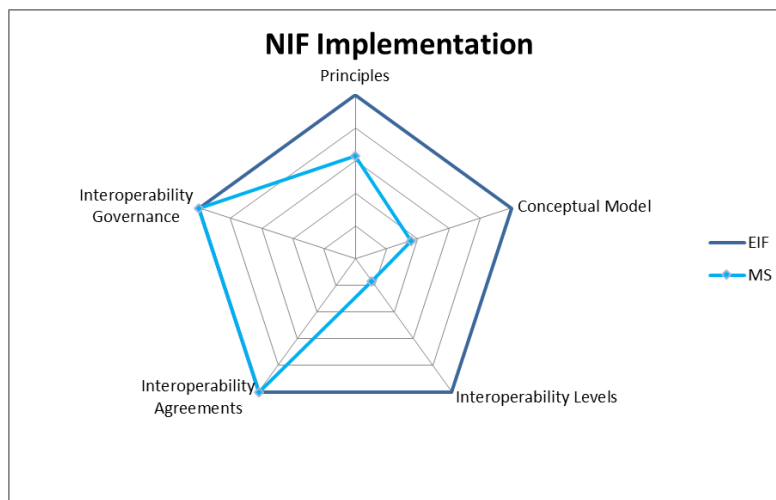
To facilitate service and manage interoperability in business processes is important to define how change is implemented.

- Change Management aspects are taken up with the technical standards ("Suggestions for management changes that the introduction and use of means, both internal changes users and coordination between users who implement and use criteria."). Change management, where relevant, is included in the Interoperability-section of the NIF (see samvirkni.ut.is). Also, for each chapter, there are provisions for scope of specifications, impact of interoperability, best practices and guidance and tools. These can be defined per standard, or generally for each chapter (topic section). This is included in the interoperability section of the NIF, as relevant, applicable to each reference or topic section.

See: <http://samvirkni.ut.is/samvirkni/>

Implementation of NIF

The Implementation in Iceland is mainly focused on the Principles, Interoperability Agreements and Interoperability Governance, with the Conceptual Model and Interoperability Agreements implemented to a lesser extent.



For the principles dimension, nine out of twelve principles are implemented, mainly through examples such as www.island.is (central single-point-of-contact e-government website for all levels of government), www.rsk.is (the taxation), www.stjornarradid.is (all ministries), and in many value-added services by private providers (i.e. messaging services at www.sendill.is, www.advania.is, www.staki.is), guidelines and recommendations such as for government websites and ebusiness (see www.ut.is) and infrastructure aspects such as Island.is authentication service and the Islandsrot PKI-IS trust domain.

The conceptual model is also used for the implementation of the website www.island.is that provides services and their access, and control mechanisms of access.

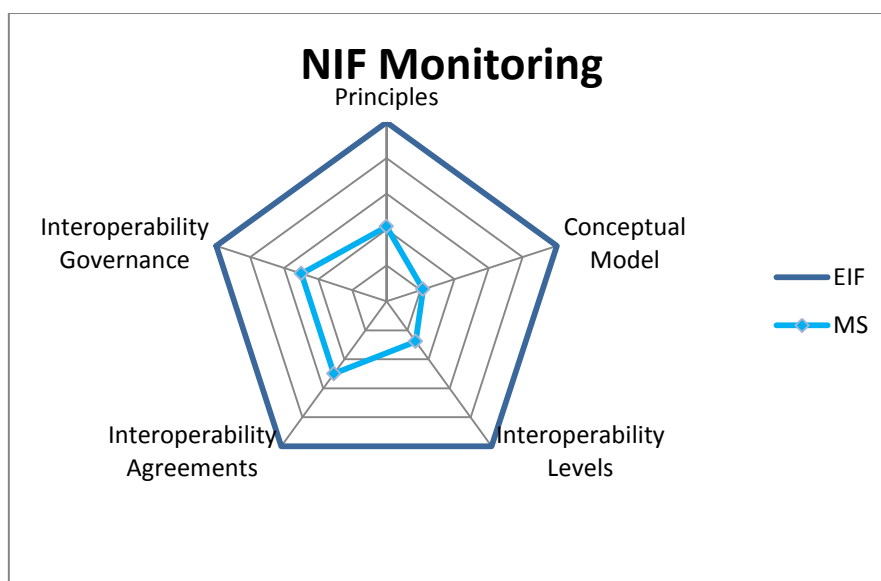
As regards the interoperability levels dimension, the Icelandic NIF website provides information on the levels of interoperability and the formalised specifications².

The interoperability agreements are based on the Icelandic NIF that has a structured, transparent and objective approach to assess and select formalized specifications. By agreeing to the NIF (establish and maintain), the interested parties (public and private sector, R&D and citizens) are participating in assessing and selecting formalized specifications, which will be the reference requirements in all implementations of electronic services.

The interoperability governance is also covered by the NIF, which is based on agreement across all administration levels and is intended to control the interoperability activities in both public and private sector. The NIF itself is such an agreement and provides the description of the roles and responsibilities of the stakeholders.

Monitoring of NIF

Monitoring is done for elements of each categories.



Iceland Ministry of Finance and Economic Affairs mandates ICEPRO to implement and systematically monitor the activities and the criteria linked to the interoperability. It is the first step to reach full supervision and monitoring of the whole set of EIF elements aligned with Icelandic NIF. As they are most often part of the concerned project, the ICEPRO experts are expected to play a key feedback role by implementing the change in thinking and acting in eGovernment projects³.

² <http://samvirkni.ut.is/samhengi.html>

³ <https://joinup.ec.europa.eu/node/156435>

More information on all the implementation and monitoring examples is provided on the NIFO Community on JoinUp on the [Compare NIFs](#) page.

Example of implementation/monitoring – Conceptual Model: Access control

In Iceland, the Access Control is related to the Public Key Infrastructure Iceland (PKI-IS).

- The PKI-IS is fully implemented and operational, provided important interoperability for authentication and signatures, and currently being expanded to include certificates and secure communication infrastructure, based on standards. Many public services use a central access management service called "Auðkenningarþjónusta Ísland.is", which is a central aspect of the single contact government services website www.island.is. Also, the Directorate of Health is in the pilot phase of building a patient-portal for all health services in Iceland, where access management of both citizens and professionals is at the core. See <https://www.island.is>
- The Ministry of Finance and Economic Affairs, the Director General of the Financial Management Authority and the Auditor General all endorsed the Government Accounts with electronic signatures, using digital certificates. Over the next few years the use of electronic ID is to be greatly increased in Iceland, to make this the principal means of identification for various types of electronic services and Internet transactions. Iceland is the first country to make use of electronic signatures in signing annual financial statements, as for the past three years private sector companies have endorsed their accounts in this manner. Auditors have also used electronic ID in communications, both for authentication and electronic signature, with the Directorate of Internal Revenue and the Directorate of Customs for quite some time.

Other initiatives on interoperability

ICEPRO (the Icelandic Committee on Trade Procedures and e-Commerce - <http://www.icepro.is/>) brings together a group of specialists from key public institutes and ministries. They evaluate the standards and norms documented into the Icelandic NIF, and used in developing the public e-services in the country. As from 2017, all the public sector projects will be monitored using national and/or European interoperability as evaluation grid⁴.

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⁴ <https://joinup.ec.europa.eu/node/156435>