

NIFO Factsheet – Netherlands

The EIF is translated and described in a national framework, namely NORA (Nederlandse Overheid Referentie Architectuur):

- See e-Overheid.nl: <http://www.e-overheid.nl/onderwerpen/over-de-e-overheid/architectuur/nora-familie/nora>
- See NORA wiki: <http://www.noraonline.nl/wiki/Hoofdpagina>

Main interoperability highlights

The Dutch NIF is called NORA¹ (*Nederlandse Overheid Referentie Architectuur – Dutch Government Reference Architecture*). The latest version of NORA 3.0 (which further builds on NORA 1.0 – 2006 - and NORA 2.0 - 2007) includes changes for better usability for architects and project managers and better understanding to policy makers and managers.

Summary of the NIF

NORA 3.0 consists out of a number of separate, but linked, documents. The NORA Strategy Supplement² is written for organizations that carry out public services. It contains ten strategic principles that outline the service quality that citizens and companies may expect from these organisations. In addition, it explains what NORA is, why it is important and how it should be used. The NORA principles for cooperation and service delivery³ present 40 'derived principles' which are derived from and substantiate the basic principles. These can be used as a sort of quality checklist to develop interoperable public services. The Service Oriented Architecture file is an easy to understand introduction to SOA for public organizations that offer public services. The NORA file for Geo-information⁴ is a guideline on how geographical information has to be treated by public administrations. NORA file Policy Frameworks⁵ gives an overview of all the policy instruments (e.g. rules, regulations) on which NORA is based and which the public organizations should follow.

¹ NORA: http://www.noraonline.nl/wiki/NORA_online

² <https://www.digitaleoverheid.nl/wp-content/uploads/sites/8/2017/01/architectuur-van-de-vreemdelingenketen.pdf>

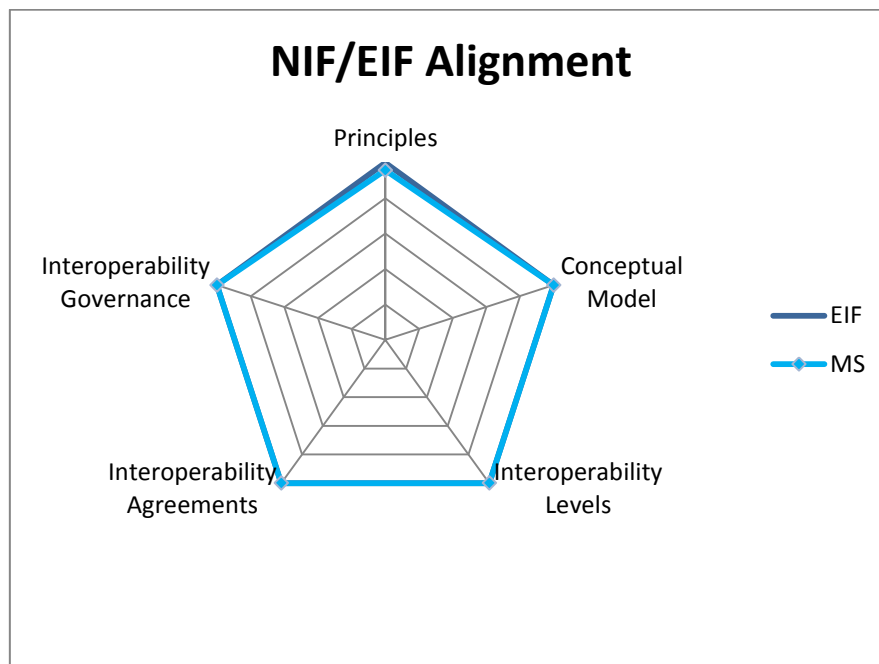
³ <https://www.digitaleoverheid.nl/voorzieningen/interconnectiviteit/nora/>

⁴ <http://www.geonovum.nl/sites/default/files/standaarden/20101119NORAadossierGeo-informatie.pdf>

⁵ <http://noraonline.nl/wiki/Beleidskaders>

Alignment NIF/EIF

The Dutch NIF is strongly aligned with the EIF on all dimensions. Most recommendations of the EIF are embedded in the derived principles presented in the NORA principles for cooperation and service delivery.



NORA covers fully all the principles through their derived principles, except for the principle of Multilingualism that is not fully aligned with the EIF.

The conceptual model of NORA is focused on a service-oriented approach. NORA is fully aligned on all the recommendations of the EIF for the conceptual model, as well as for the elements of the interoperability levels.

On interoperability agreements, NORA encourages the public administrations to make use of open standards. The individual service providers themselves bear the responsibility to implement NORA in the services that they offer. NORA proposes the public administrations to use principles and a set of agreements concerning the design of government services, including actual information on used technical standards within Building Blocks⁶ etc.

NORA stresses that public administrations should set up a governance process that ensure that the plans are actually implemented and that the derived principles of NORA are properly followed. NORA mentions, GEMMA⁷, PETRA⁸ and WILMA⁹, which contain a set of agreements concerning the design of e-government services for different levels of public administrations.

⁶ http://noraonline.nl/wiki/Bouwstenen_en_gebruikte_standaarden/alle

⁷ [http://noraonline.nl/wiki/GEMMA_\(Gemeentelijke_ModelArchitectuur\)?pk_campaign=digovнора](http://noraonline.nl/wiki/GEMMA_(Gemeentelijke_ModelArchitectuur)?pk_campaign=digovнора)

⁸ [http://noraonline.nl/wiki/PETRA_\(Provinciale_EnTerprise_ReferentieArchitectuur\)?pk_campaign=digovнора](http://noraonline.nl/wiki/PETRA_(Provinciale_EnTerprise_ReferentieArchitectuur)?pk_campaign=digovнора)

⁹ [http://noraonline.nl/wiki/WILMA_\(Waterschaps_Informatie_%26_Logisch_Model_Architectuur\)?pk_campaign=digovнора](http://noraonline.nl/wiki/WILMA_(Waterschaps_Informatie_%26_Logisch_Model_Architectuur)?pk_campaign=digovнора)

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

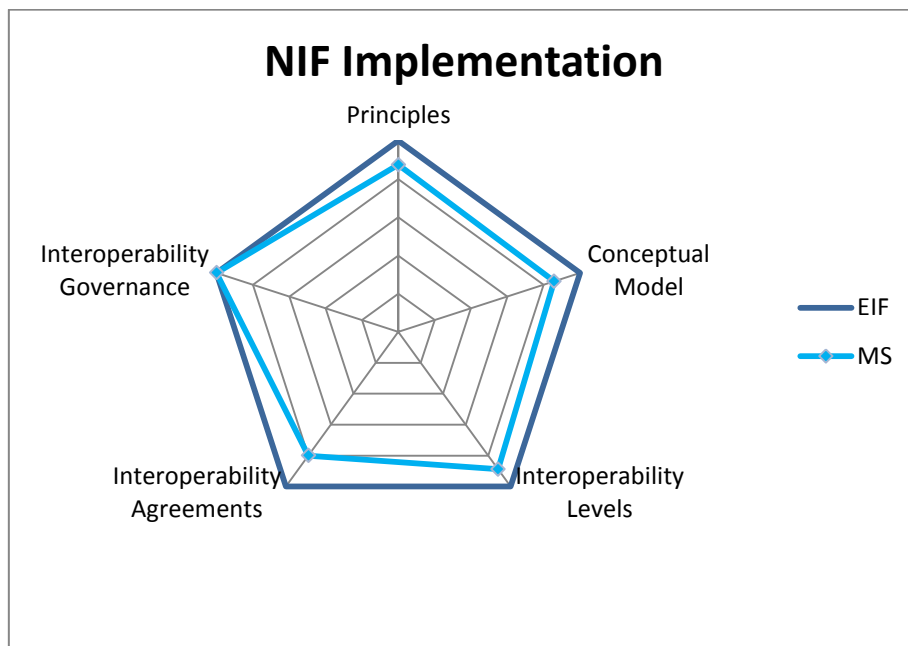
Example of alignment – Interoperability Levels: Organisational interoperability - change management

The Dutch Government Reference Architecture (Nederlandse Overheid Referentie Architectuur, NORA) ensures continuous service delivery based on change management processes.

- NORA provides the following principles (AP) 31: “The quality of the service is governed on basis of cyclical feedback”, (AP) 25: “Delivery of the service is continuously guaranteed”. See NORA principles for cooperation and service delivery, <https://www.digitaleoverheid.nl/voorzieningen/interconnectiviteit/nora>

Implementation of NIF

The Netherlands performs very well on the implementation of interoperability governance, the principles and the conceptual model, and interoperability agreements and perform well on the interoperability agreements levels.



The principle of subsidiarity is implemented with the global government, the provinces, and the municipalities, using their own specific IF's which are derived from NORA. User-centricity is implemented through the vision document on eGovernment¹⁰. The Web Guidelines¹¹ contain the principles and guidelines for the accessibility of web content; they are part of the open standards of the Dutch Government. Security and privacy is implemented through the DigiD¹² (digital identity). Information about many public services is available in several languages,

¹⁰ <http://e-overheid.nl/images/stories/Publicaties/visieenactieprogrammabeterepubliekediensverlening.pdf>

¹¹ <http://www.answersforbusiness.nl/>

¹² <https://www.digid.nl/>



2016 update.

providing examples of implementation of the multilingualism principle. The administrative simplification principle is implemented through Dutch Advisory Board on Regulatory Burden¹³. Openness is implemented through the portal MijnOverheid - My Government¹⁴ and the open data portal. The NORA contains a specific theme on preservation of information¹⁵ and the National Archive has a country wide community to develop this theme to keep it up to date. The publication of open data by the ministries is a common practice¹⁶. The reusability principle is implemented by the Legislation on the Generic Digital Infrastructure (GDI) and the GDI reusable building blocks consists of standards, products and services that are jointly used by all governments, many public organizations and in some cases by private parties. Technological neutrality and adaptability is implemented through the Digital Agenda and efficiency and effectiveness is managed through the assessment of architecture of big IT related programmes and projects.

The conceptual model is implemented with the basic architecture for public sector organisations¹⁷. The model is applied through the *Digikoppeling* that lists services that are available from the government service bus and the authentic sources; 13 base registries that provinces, municipalities and water boards have access to and use for the delivery of public services. The Dutch government is currently working on the development of the National Semantic View for interfaces to the base registries.

The interoperability levels are implemented through NORA and through Logius¹⁸ that takes care of the operational management of government services. The Program Board ('programmaraad') discusses and establishes change management processes and procedures, and advises Logius.

As regards the interoperability agreements, the Standardisation Forum¹⁹ promotes interoperability and use of open standards within the Dutch government. The Board manages the list of recommended and mandatory open standards that apply to the entire public sector.

Interoperability governance is implemented through the IFs at the different administrative levels of government, derived from NORA. These are: EAR²⁰ for national government, PETRA²¹ for regional government (provinces) and GEMMA²² for local government.

¹³ <http://www.actal.nl/english/about-actal/>

¹⁴ <https://mijn.overheid.nl/#tabs-mijnoverheid>

¹⁵ http://noraonline.nl/wiki/Digitale_Duurzaamheid

¹⁶ See inventory by Ministry: <https://data.overheid.nl/inventarisatie-departementen-2015>

¹⁷ See [http://noraonline.nl/wiki/Security_Principles_for_Cloud_and_SOA_\(TOGAF\)](http://noraonline.nl/wiki/Security_Principles_for_Cloud_and_SOA_(TOGAF))

¹⁸ <https://www.logius.nl/>

¹⁹ <http://forumstandaardisatie.nl/>

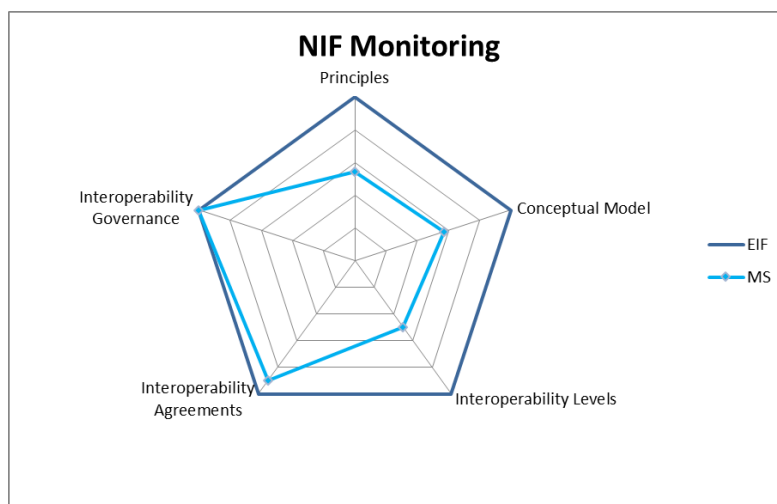
²⁰ www.earonline.nl

²¹ <http://www.wikixl.nl/wiki/petra>

²² <http://www.gemmaonline.nl>

Monitoring of NIF

The Netherlands performs very well on monitoring of interoperability agreements and governance, and well in the other categories.



In general, the reference architectures implementing the different elements of the IFs contain design principles which are monitored by a method of comply-or-explain. According to the community of architects, many projects follow the implementation of the reference architectures.

A specific monitoring of the Open Standard Policy is available online²³. Each year the implementation of the building blocks and standards is monitored by the Dutch Office for Standardization.

With regards Information Security and Privacy, all governmental organisations have specific civil servants appointed to monitor these aspects and report on a yearly basis.

On a daily basis the communities implementing the reference architectures work together to make the Dutch interoperability framework more useful.

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

²³ http://noraonline.nl/wiki/Monitor_Open_Standardenbeleid_2015

Example of implementation – Interoperability agreements: preference for open specifications

The Forum and College for Standardisation promote interoperability and use of open standards within the Dutch government. The College manages the list of recommended and mandatory open standards that apply to the entire public sector. The Forum Standardisation supports the Dutch Government in the use, development and establishment of open standards for electronic data exchange, and in particular to support and advise the College for Standardisation. In this way, it promotes interoperability, not only within the Dutch government system itself, but also within governmental agencies, as well as for citizens and businesses.

The Forum Standardisation uses criteria for the selection of open standards that include criteria for functional needs, market support and maturity.

See: <http://forumstandaardisatie.nl/>

See: http://noraonline.nl/wiki/Monitor_Open_Standaardenbeleid_2015

Other initiatives on interoperability

End of 2016, the Dutch Government supervised a public consultation to accompany the drafting of a legislation on the generic digital infrastructure. This piece of law intends to implement the ambitions of the digital government. The purpose is to make mandatory the use of recognised means of authentication for digital public services and to establish the competence to determine obligatory open standards.

iNUP, the National Implementation Programme for E-Government Services²⁴, is fully completed. The central government, executive organizations, municipalities and suppliers have created the digital infrastructure, which is an integral part to enhance (digital) public services. The digital infrastructure is then used to exchange data and information with other government institutions and provide digital, trustworthy, and safe services.

Dataoverheid.nl (<https://data.overheid.nl>) is the Dutch open data portal that provides access to national datasets. The portal currently provides access to over 10.000 datasets (<https://data.overheid.nl>). The amount of available datasets has multiplied by four during the last two years. These sets are also accessible via ODIP (<https://data.europa.eu/euodp/en/data>), the pan-European single point of access to European datasets. Numerous applications have used one or more datasets that are available on the portal.

The Basic Registration of Persons (BRP)²⁵ law (that came into force in 2014) has improved the quality of the personal records registration, both for citizens and governments. In parallel, a new tool for citizens was introduced to enable them to view the usage of their personal records within the government.

²⁴ <http://www.rijksoverheid.nl/onderwerpen/digitale-overheid/betere-dienstverlening-en-een-kleinere-overheid>

²⁵ <http://www.rijksoverheid.nl/nieuws/2014/01/07/wet-brp-regelt-betere-registratie-van-persoonsgegevens.html>



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