NIFO
NIFs Implementation and Monitoring State of Play 2015

The European Interoperability Framework (EIF) provides guidance to European public administrations when designing European public services. The majority of European countries have taken into account the EIF in their National Interoperability Frameworks (NIFs). The National Interoperability Framework Observatory (NIFO) monitors interoperability activities in European countries. It is based on the analysis of the NIFs in the countries covered (using an analytical model (AM)).

Three complementary scores are relevant to assess NIFs:

- **Alignment** score to measure to which extend the NIFs correspond to the EIF;
- **Implementation** score to evaluate how far the NIF elements are turned into executed projects. This goes from identification of some project examples (50% score) to evidence of systematic and large scale implementation (100% score);
- **Monitoring** score to assess how the national authorities monitor themselves the application of the NIF. It ranges from partial (50% score) to full (100% score) monitoring.

This short report summarises the main findings on the current **state of play of implementation and monitoring of the NIFs** within the EU. It is based on the NIFO data collection exercise performed during 2015, with information provided by National experts and collected through desk search. This information is now available online in the country's analytical model (AM). Implementation data is available for 24 countries and monitoring data is available for 18 countries. The last data collection exercise (2015) **refines the implementation and monitoring scorings**.

THE OVERALL AVERAGE OF THE NIF IMPLEMENTATION LEVEL FOR 2015 IS OF 45%, WITH 10 COUNTRIES SCORING OVER 50% AND FOUR OF THESE SCORING OVER 80%.

THE OVERALL AVERAGE OF THE NIF MONITORING LEVEL FOR 2015 IS OF 33,4%, WITH 6 COUNTRIES ABOVE 50%, OF WHICH 3 ARE ABOVE 80%.

The analysis of the implementation and monitoring of each NIF is organised around the five dimensions of the EIF: **Principles, Conceptual Model, Interoperability Levels, Interoperability Agreements and Interoperability Governance**. Each dimension contains a number of specific elements allowing measurement of the NIF implementation and monitoring.

NIF implementation

Figure 1 below shows the level of NIF implementation in each of the 24 countries assessed in 2015. The **overall average of the NIF implementation level for 2015 is of 45%**, with 10 countries scoring over 50% and four of these scoring over 80%.
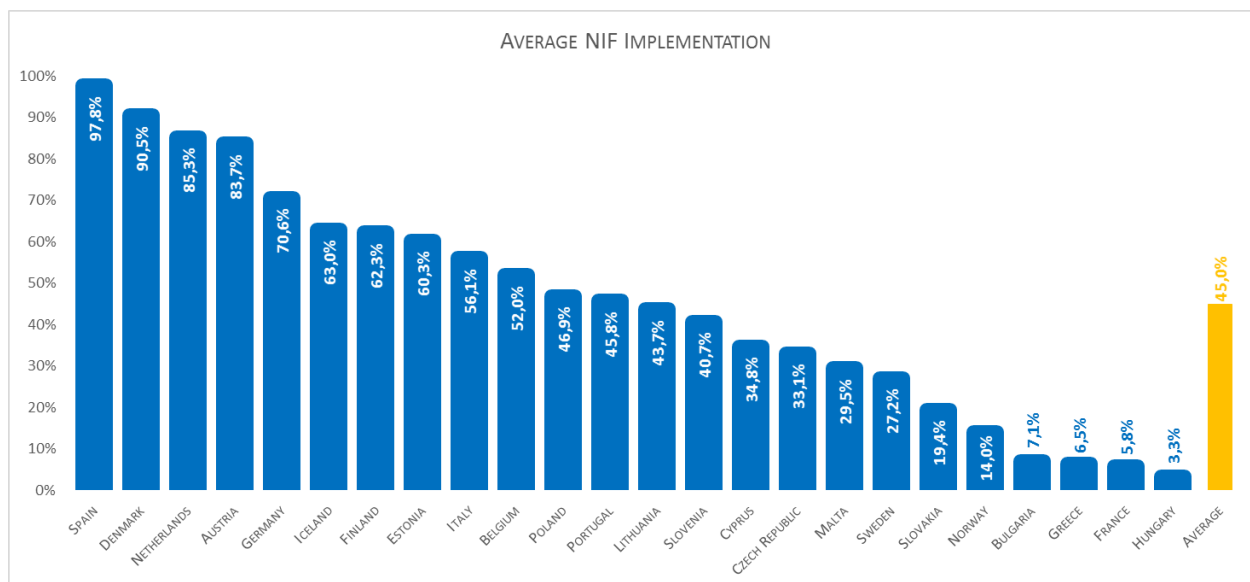

Figure 1: Average NIF implementation

Divergence in NIF implementation scores is high.

- ✓ In general, countries with only a few implementation examples score less than countries with a systematic, large scale and organised implementation (such as a reusable digital infrastructure implemented as a common practice supporting every new project).
- ✓ The difference in scores is also explained by the fact that some countries have a NIF for a longer time than others.
- ✓ In some cases, the different scores can be associated with lack of thorough data. Indeed, some countries provided comprehensive data on implementation. For other countries, data is gathered through desk search and cannot reflect thoroughly the actual state of implementation.

THE NETHERLANDS IMPLEMENTS THE REUSABILITY PRINCIPLE WITH THE LEGISLATION ON THE GENERIC DIGITAL INFRASTRUCTURE (GDI). 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.

Some countries do not have a NIF and a related AM, but nonetheless demonstrate **best practices** in interoperability initiatives, as Luxemburg for example.

Figure 2 below shows the **average NIF Implementation for each NIF dimension**. The blue bar shows the average NIF implementation (calculated as the average of the scores for all countries for each of the five dimensions).

The green spot shows the highest level of NIF implementation for each dimension (measured as the highest score reached by a country) and the orange spot the lowest level of NIF implementation per dimension (measured as the lowest score reached by a country).

All dimensions reach 100% implementation by at least one country except for the interoperability levels dimension. The Principles[1] dimension is the only one implemented by all countries. It shows an average implementation score of 59,9%.

Figure 2 NIF implementation for each dimension

NIF IMPLEMENTATION FOR EACH DIMENSION

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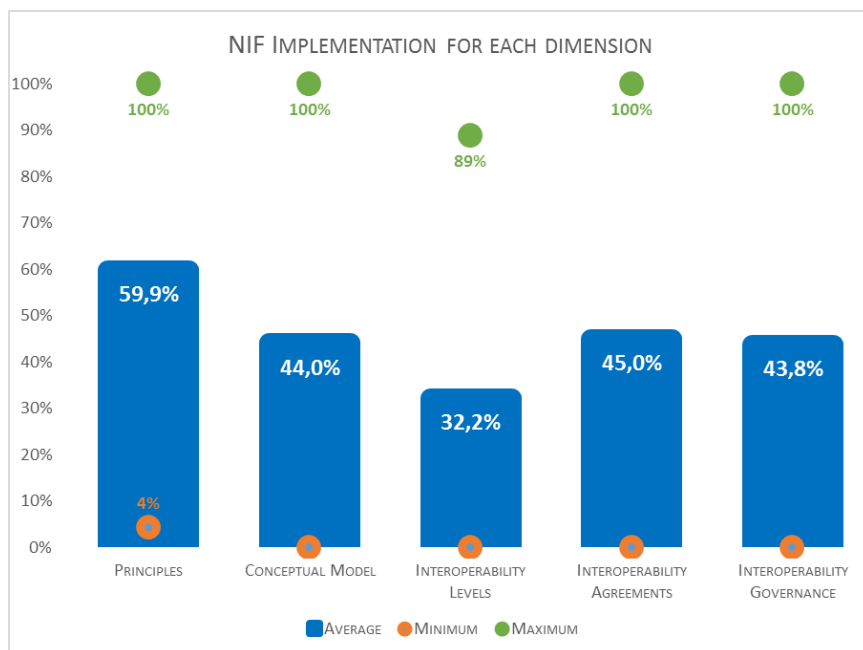
[1] Principles are: Subsidiarity and proportionality, User-Centricity, Inclusion and accessibility, Security and privacy, Multilingualism, Administrative simplification, Transparency, Preservation of information, Openness, Reusability, Technological neutrality and adaptability, Effectiveness and efficiency.

NIF monitoring

Figure 3 below shows the level of NIF monitoring in each of the 18 countries assessed in 2015. **The overall average of the NIF monitoring level for 2015 is of 33, 4%**, with 6 countries above 50%, of which 3 are above 80%.

AVERAGE NIF MONITORING

Austria 100,0%
Estonia 83,2%
Spain 82,7%
Netherlands 70,3%
Denmark 54,7%
Germany 50,2%
Italy 30,9%
Slovenia 26,6%
Czech Rep 24,7%
Malta 23,0%
Lithuania 17,5%
Sweden 10,3%
Norway 8,1%
Belgium 7,9%
Finland 5,6%
Cyprus 2,5%
Iceland 1,7%
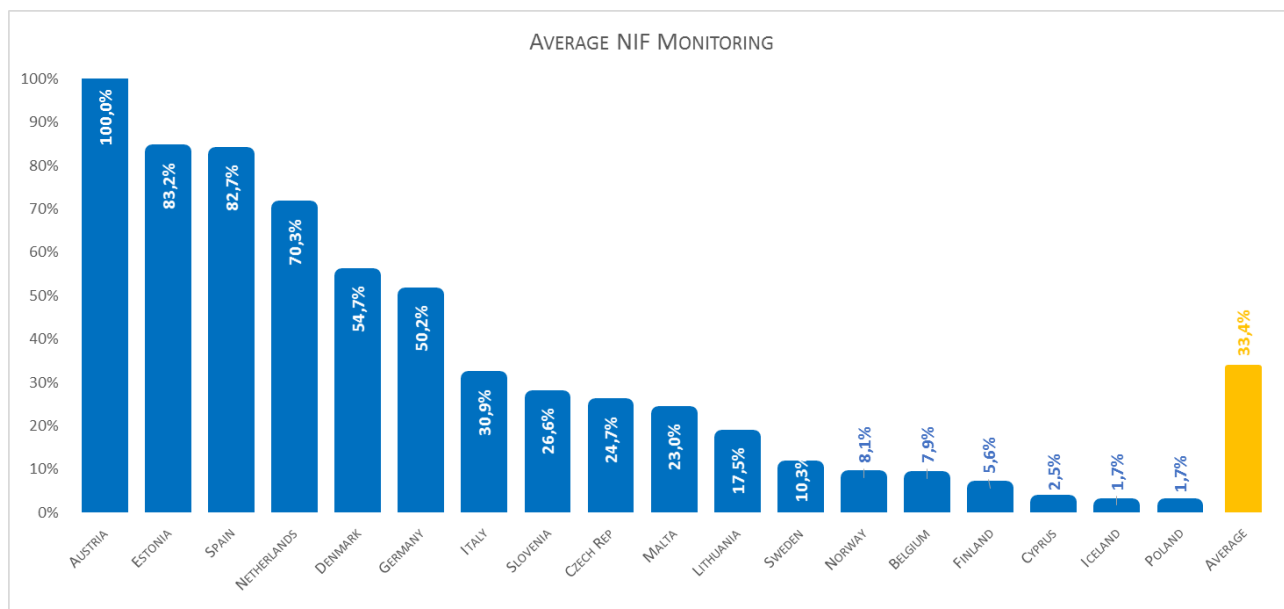Poland 1,7%
Average 33,4%

Figure 3 Average NIF monitoring

Some countries have a very high monitoring level, but divergence in scores is high, and can be explained by the type of **monitoring approach**.

Countries with a large scale and organised monitoring of the NIF score high. This is for example the case when a dedicated body is entrusted with the monitoring of all aspects of a NIF.

Many countries organise their monitoring independently from the NIF or interoperability governance, which result in a less systematic approach and in a lower score.

Austria scores 100% in monitoring of its AIF (Austrian IF). Digital public services developed are continuously monitored by the cooperation board, ensuring full alignment with the definitions and policies stated within the AIF. The tracking of the alignment with the AIF is embedded in the overall process of monitoring the progress of a concrete project.

Figure 4 below shows the **average NIF Monitoring for each NIF dimension** (Principles, Conceptual Model, Interoperability Levels, Interoperability Agreements and Interoperability Governance). All dimensions reach 100% monitoring by at least one country. The **Principles** dimension is the only one monitored by all countries. It shows an average implementation score of 51,6% and is the most monitored dimension. This is in line with the fact that the Principles dimension is also the most implemented one, as shown in Figure 2.
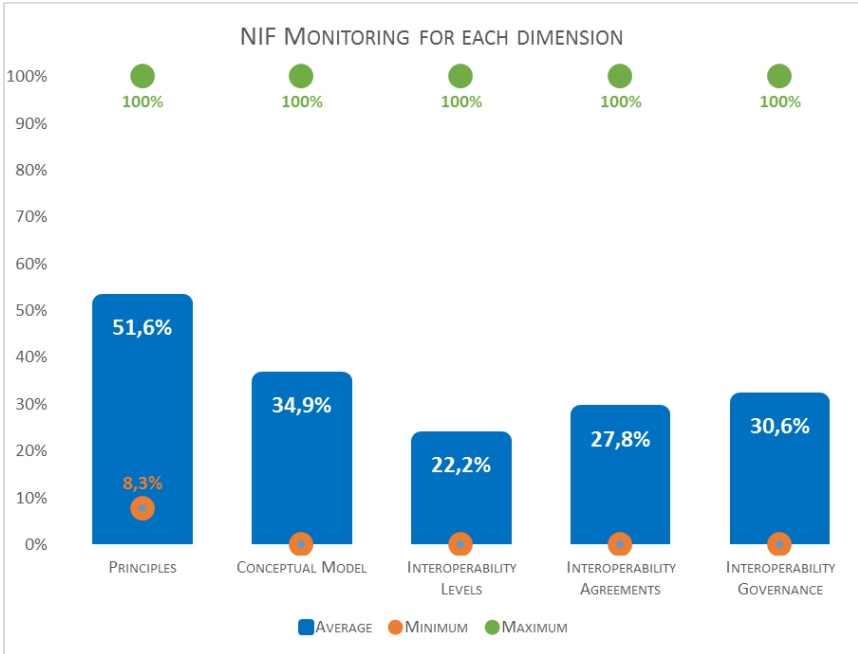

Figure 4: NIF monitoring for each dimension