

Business Case for Data Governance Framework for Interoperability

This business case was prepared by Juan Muñoz (INEGI/Mexico), and is submitted to the HLG-MOS for their approval.

Type of Activity

New project Extension of existing project

Purpose

With statistical organisations increasingly engaging with new data sources (e.g., big data, administrative registers, etc.) and accelerating efforts in sharing and re-using data, the governance and management of data have become crucial. Interoperability across different data assets and metadata can greatly facilitate data exchange, and help statistical organisations address new data needs (e.g., through data integration). Unfortunately, a large part of the information in many statistical organisations is managed and governed in silos, making information semantically and synthetically non-interoperable.

While there has been much attention on access to data (e.g., privately held data, social acceptance, statistical laws) or technical aspects (e.g., data storage, integration methods), there is not enough work done on the governance side (e.g., policy, process, capability), which is indispensable to institutionalise interoperability across the entire organisation.

The purpose of this project is to develop a framework describing a set of data governance elements, recommendations, and guidelines to achieve statistical information interoperability. The project started in early 2022 and the rest of this document summarises the work done and describes its plan for 2023.

Description of the project and the Work Packages/sub-activities

Throughout the discussions in 2022, there was a strong consensus among project members that information silos are impeding the full realisation of potential of the information that exists in the different domains and programmes in statistical organisations.

There are many IT tools that are being used to link information, but the lack of common concepts, classifications, constraints, and methodologies leads to limited results, or even misinterpretation of information.

For these reasons, the team decided to produce a guiding document (outlined below) as a contribution to improve interoperability, and to pave the way to having a real statistical data and metadata platform to connect the different domains. This could serve as a basis for developing a new generation of statistical products and services able to deal with the new needs of the users.

The main output of the project will be a document containing as its main sections:

- A glossary of core terms that could facilitate communication and collaboration in the fields of data governance and interoperability.
- A framework describing a set of data governance elements required to achieve statistical interoperability, including (but not limited to): organisational elements; data and metadata management; business and legal considerations; data quality; data analysis and dissemination needs; documentation and transparency; capabilities, culture and skills, and Information Technologies aspects.

- Recommendations and guidelines on how to start achieving interoperability in statistical organisations and national statistical systems; in particular, how we can apply existing models and standards (e.g., GSBPM, GSIM, CSPA, SDMX, DDI, CSDA, COOS, and FAIR) to achieve interoperability.

It is important to note that there is some other work around data governance in the field of statistics (but not focused in achieving interoperability), that will be used as references to provide value to statistical modernisation efforts.

Deliverables and timeline

In early 2022, a team was organised to perform this project. That team is composed of experts with different backgrounds, providing diverse points of view, therefore much effort was spent agreeing on the scope of the project and defining the main aspects that the framework must cover. The team also has agreed on the main concepts that the framework needs to communicate to people. Now this team is working on developing the contents of the framework.

In the next year:

- By the first quarter of 2023, the team aims to finish the structure and description of the components of the framework.
- In the second and third quarter of 2023, the team will work in developing the recommendations and guidelines with which to achieve interoperability.
- For the last part of 2023, the team plans to finish the editing that document.

Offices/Countries committed

The team has committed experts from the following organisations and countries: Canada, Egypt, France, Hungary, Israel, Italy, Kyrgyzstan, Mexico, Saudi Arabia, USA, ILO, OECD, and UNECE.

Alternatives considered

The work that has been developed by the team in agreeing concepts and elements needed for the framework this year is very valuable, and the team has reached a phase in which we are developing contents that will be valuable for the statistical community, so the work must continue next year to deliver its full potential.

How does it relate to the HLG-MOS vision and other activities under the HLG-MOS?

The project is completely aligned with the aims of the HLG-MOS groups, and provides an excellent opportunity to provide a structured set of data governance elements needed to achieve statistical interoperability while making use of the existing models and standards in the Modernstats community.

Proposed start and end dates

Start: January 2023

End: December 2023