SDMX for standardizing and industrializing the Dissemination business process – Istat case study

Francesco Rizzo
Istat
SDMX Istat Strategy as part of Stat2015 modernization program
Implementing steps of the SDMX strategy

- Looking for the necessary funds to support the implementation
- Develop a suitable cross-cutting architecture
- Streamlining the internal capabilities and capacity building actions
- Collaborating with other organizations
Results achieved up to now

- Developed the SDMX Istat Framework
- Metadata management system in production
  - all disseminated datasets described through SDMX artefacts
  - legacy “reference and quality metadata system” wrapped for extracting SDMX metadata sets
  - developed APIs for handling SDMX artefacts for reference metadata
- Dissemination data warehouse accessible through the SDMX Single Exit Point
- Streamlined the reporting system
Istat - SDMX architecture
SDMX Istat Framework

- A set of pick-and-choose building blocks allowing a statistical office to handle (macro)data and metadata (subject-matter domain independent)

- It extends the SDMX-RI in order to streamline the dissemination and reporting business processes:
  - push and pull
  - “distributed” data warehouse SDMX-based
  - web presentation of data and metadata

- It is built using the SDMX Common API (SdmxSource.NET)
SDMX Istat Framework tools

SDMX DDB Databases

SDMX Builder & Loader

DDBs

Mapping Assistant

MSDB / Registry

Mapping Repository

Data Flow Registration

Structure Metadata Repository

Web Browser Caching (Windows application)

Configuration & Cache DB

SSO

WS

SDMX Web Browser

WS SDMX

Metadata Web GUI
Lesson learnt

- SDMX is enough mature to be used beyond the data exchange between data producers (NSIs) and data collectors (IOs)
- Standardization and industrialization
- Data sharing (facilitating the open(statistical) data
- Re-using software, experiences and know-how is the only way to reduce costs and move forward quickly
- Capacity building actions for creating “consensus” and all the necessary capabilities