CountryData

Sharing Best Practice in the Dissemination of National Development Indicators

SDMX Reference Infrastructure



Costs of Implementing SDMX

- A Statistical Office often has multiple custombuilt processing and dissemination systems.
- Implementing SDMX separately at each database increases cost and complexity.
- Integrating SDMX implementations is still complex and requires sufficient scale to be cost-effective.



SDMX Reference Infrastructure

- Eurostat built SDMX Reference Infrastructure (SDMX-RI) to reduce costs and increase productivity through reusable software.
- SDMX-RI consists of a set of reusable modules that can be used to build import/export of SDMX from existing dissemination databases, without any modification of the latter.

SDMX-RI: Inputs and Outputs

- Input to SDMX-RI components is a database containing data to be disseminated, as well as a mapping store database containing structures and mappings.
- Output is SDMX-ML messages containing data and structures.
 - A Web Service to disseminate SDMX is included as part of package.
 - SDMX-RI components can also be used directly in user applications.





Implementing SDMX with SDMX-RI



- Most of the effort on configuring is put into configuring mappings between dissemination database structures and a DSD.
 - Existing dissemination database is not modified.
- Mapping Assistant is a graphical tool that facilitates the configuration of mappings.

Web Service Provider



- Once mappings are in place, SDMX-RI Web Service can be easily configured to disseminate data from the database, as well as SDMX structures.
- The Web Service greatly improves the efficiency of dissemination and makes it easy to build applications that consume SDMX data.

SDMX-RI Web Client



- An application supplied with SDMX-RI, which queries a Web Service configured with SDMX-RI, and displays the result to the user
- Query results can be downloaded as HTML, Excel, PDF, or SDMX.

SDMX Version



- Currently, SDMX-RI supports SDMX 2.0 for data, structures, and queries.
- SDMX-RI Web Service uses the SOAP protocol for access.
- Eurostat is developing an implementation of SDMX-RI that supports SDMX 2.1 and a RESTful Web Service.