

Αξιοποίηση ολοκληρωμένου πληροφοριακού  
συστήματος συλλογής, παρακολούθησης, και διάχυσης  
στατιστικών και οικονομικών δεδομένων κ'  
μεταδεδομένων με βάση το πρότυπο SDMX

Agilis S.A Statistics and Informatics

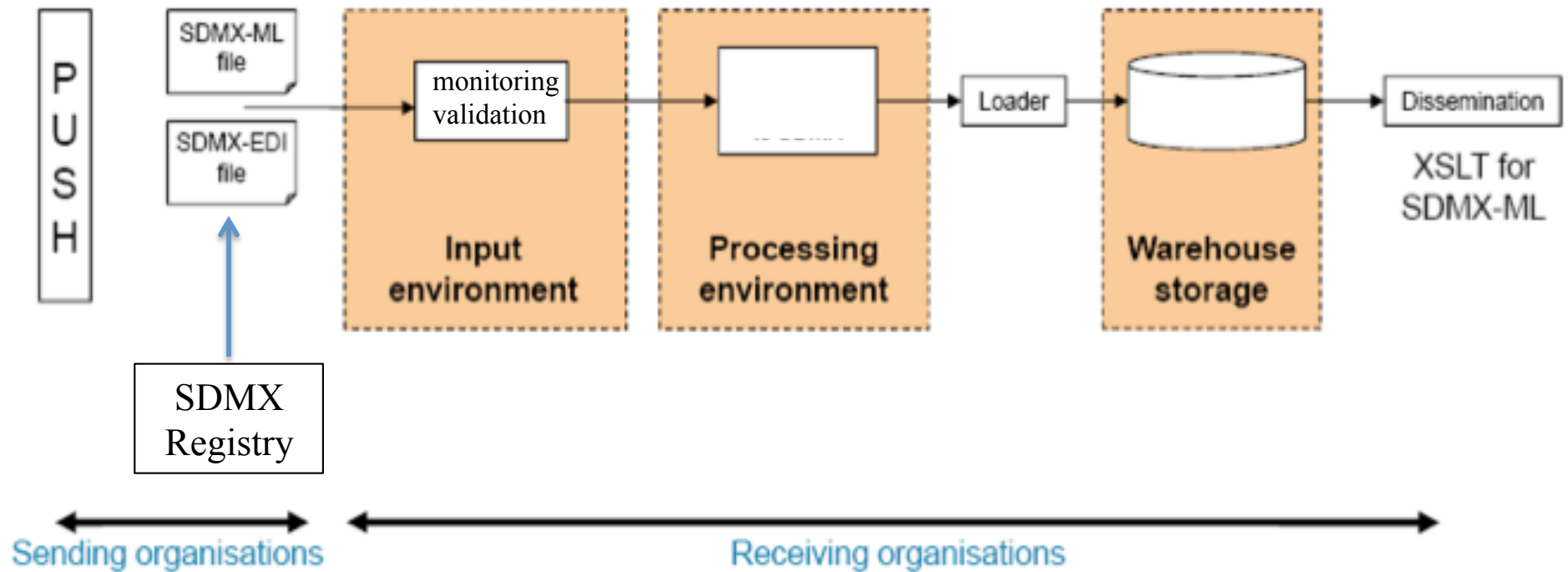


# SDMX basics

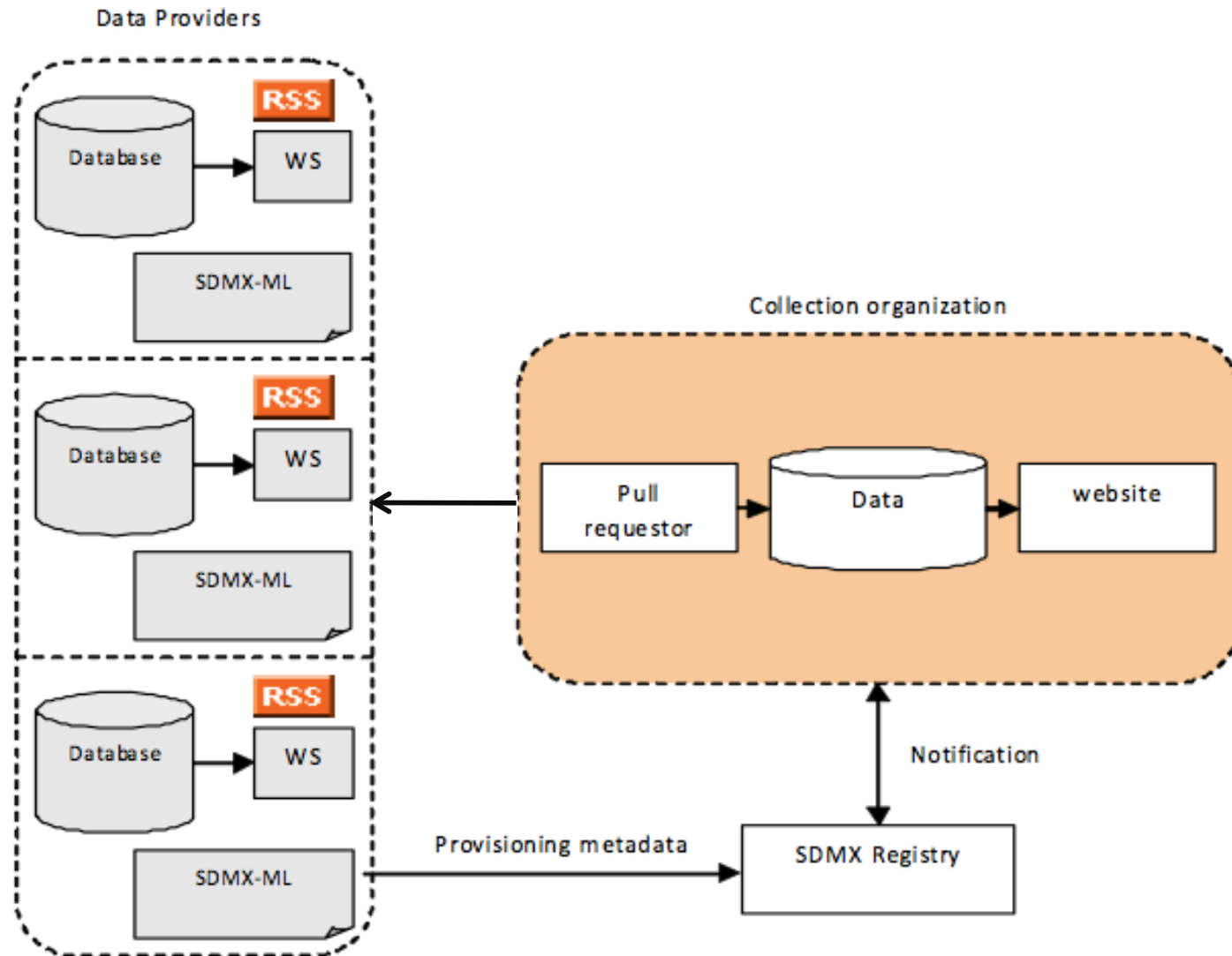
Standardisation of the **S**tatistical **D**ata and **M**etadate **eX**change process

- Sponsors : BIS, ECB, ESTAT, IMF, OECD, UN, World Bank
- v. 1.0 → ISO/Technical Specification 17369:2005 SDMX
- v. 2.0 (2005) → v2.1 (2011)
- Major components:
  - SDMX Information Model
  - Content Oriented Guidelines
  - IT Architectures for (automated) Data Exchange

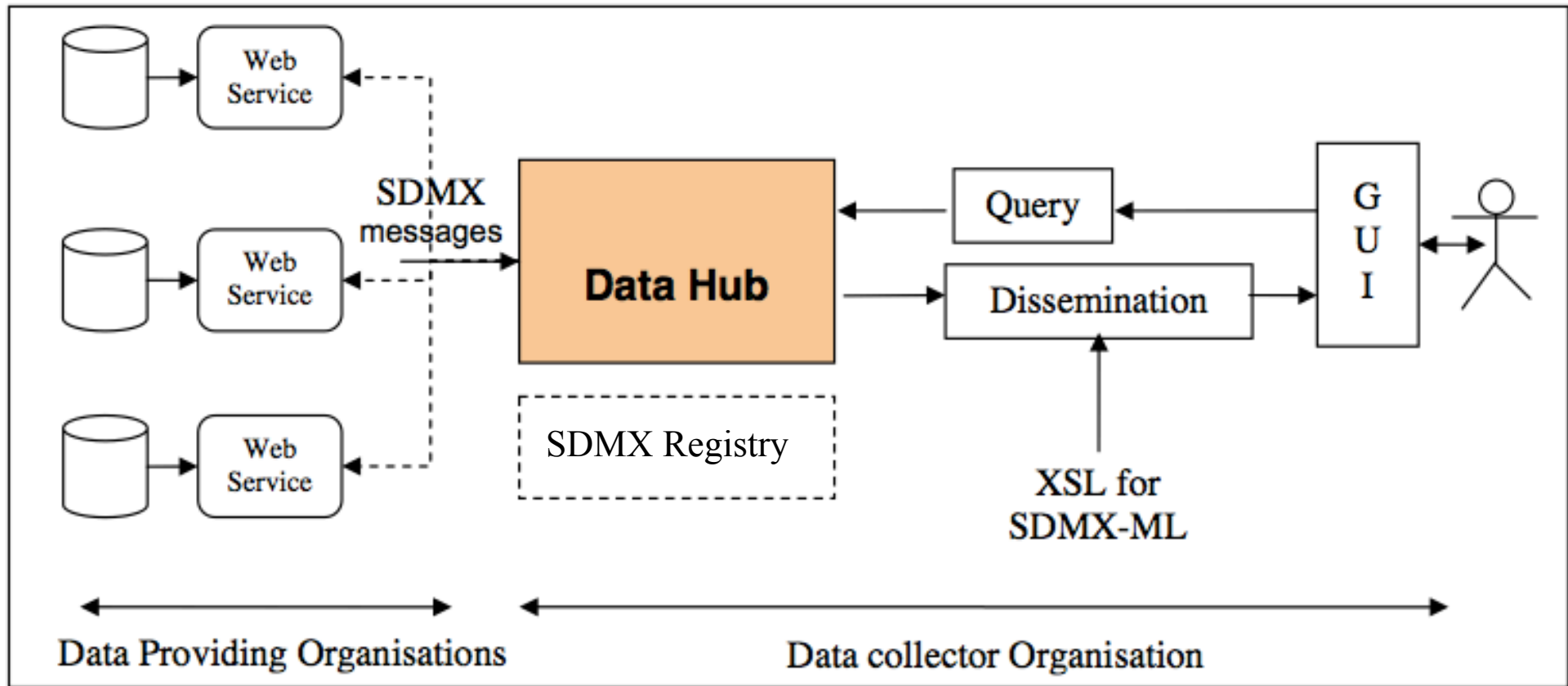
# SDMX IT architectures: Push (1)



# SDMX IT architectures: Pull (2)

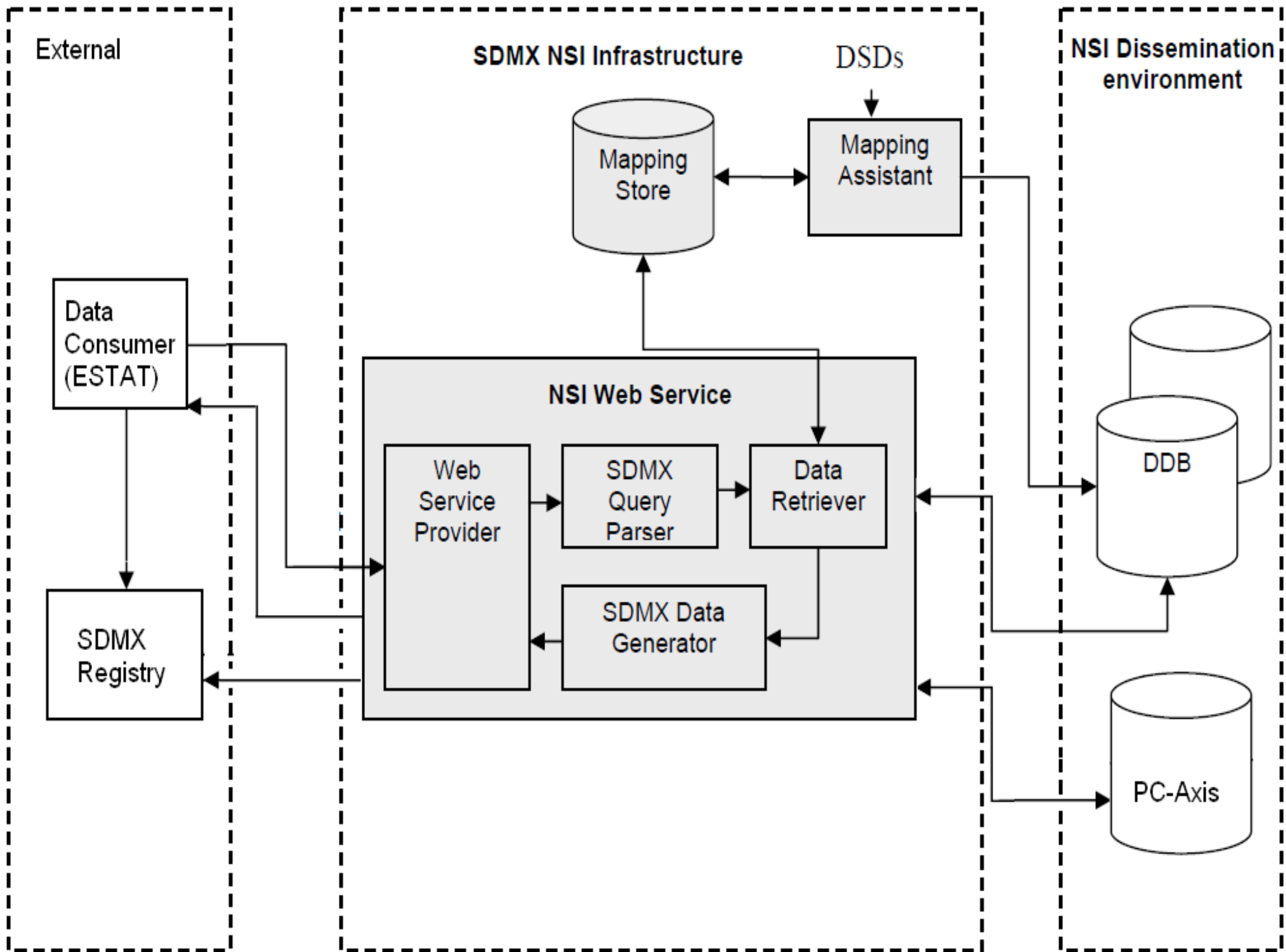


# SDMX IT architectures: Hub (3)



# SDMX Registry

- A repository for keeping
  - Structural metadata (e.g. CodeLists, ConceptSchemes, DSDs, MSDs)
  - Provisioning information (e.g. Dataflows, Provision agreements)
- Repository is accessible via a Web Service accepting SDMX-ML messages
- Graphical User Interface (GUI) for user interaction over the Web



# Mapping is key to success for SDMX implementation



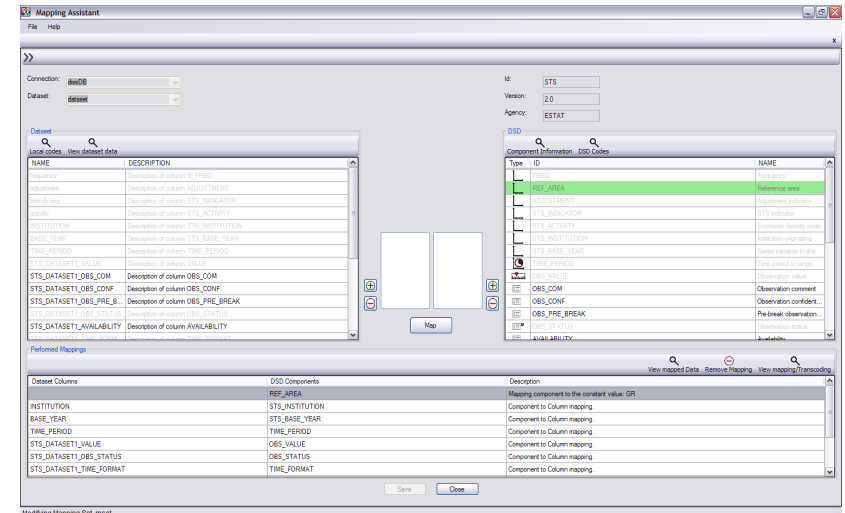
existing data



map data to

## Data are now accessible via:

- An SDMX Web service (once per dataflow)
- A Web Graphical User Interface



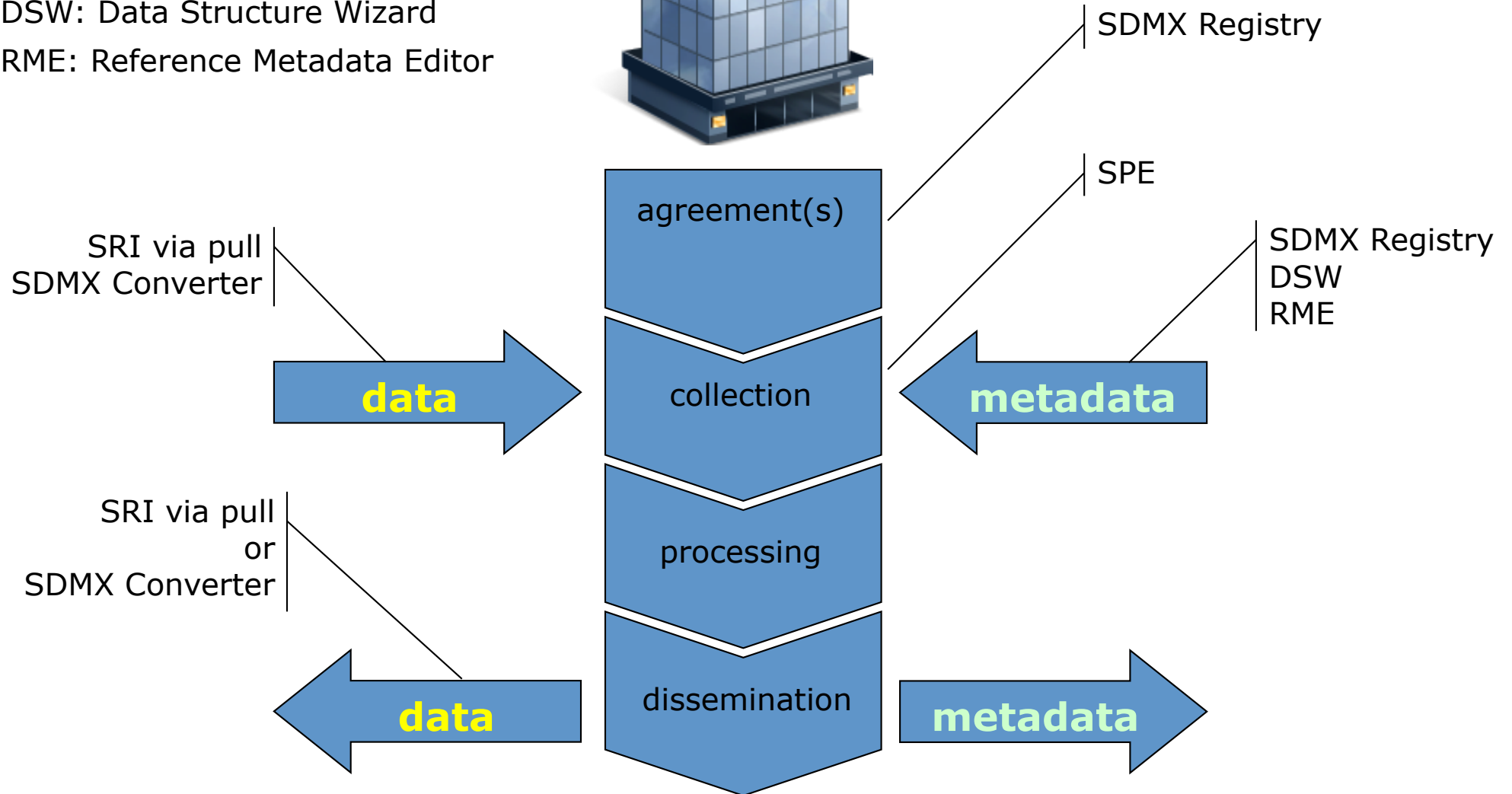
Mapping Assistant



# Eurostat



SPE: SODI Processing Environment  
SODI: SDMX Open Data Interchange  
SRI: SDMX Reference Infrastructure  
DSW: Data Structure Wizard  
RME: Reference Metadata Editor



# SDMX in production environments

- DG-Eurostat (Census Hub, PPP, SODI PEEIs, SDMX Registry and Reference Infrastructure)
- International Monetary Fund (IMF)
  - [Collection](#) and [Dissemination](#) of BOP data
  - PGI web site for G-20 countries
- ECB – Visualisation Framework ([FlexCB](#)) for the [HICP](#)
- UNSD [ComTrade Data Exchange](#)
- National Statistical Institutes
  - ISTAT, [ABS](#) (Open Source Census), Swiss [FSO](#), ...
- [Federal Reserve Bank](#)
- World Health Organisation (WHO)
  - [SDMX-HD](#) (Health Domain)
- [Google Public Data Explorer and DSPL format](#)

# SDMX Benefits

- A DSD is created only once to implement any additional dataflow at low additional cost and with **no** impact at the underlying architecture
- OSS tools ready to run and easy to integrate
- Emphasis on reusability of the components (duplication of development is avoided, development cost very low)
- European Union Public License (EUPL)
- SDMX is the new lingua franca of the official statistics community - pools the expertise and resources working on data and metadata issues in sponsoring organisations
- Can reduce the reporting burden. Data published only once and counterparties “pull” data and related metadata as required
- Ensures **quality** in both data exchange and data dissemination

# References

- [SDMX.ORG: Statistical Data and Metadata Exchange Standards, Guidelines and Tools](#)
- [CIRCA \(ESTAT\): Eurostat SDMX Reference Architecture and Infrastructure](#)
- [OSOR.EU: SDMX Tools](#)
- Technical documentation available for all tools (DIGIT guidelines)