



# Fusion Metadata Registry: Enabling metadata-driven processes

SDMX Expert Group Meeting, Xavier Sosnovsky, 2021-01-27

## In a nutshell

- Metadata maintenance and retrieval
- Governance
  - Developed by Metadata Technology (MT)
  - Owned by BIS
  - Free of charge
- The metadata part of Fusion Registry, which is used by:
  - SDMX Global Registry
  - SDMX Sponsors
  - National Central Banks, Statistical offices, Government agencies
  - Not for Profit / NGOs
  - Private sector (commercial banks & media organizations)
  - The Data Warehouse part of Fusion Registry is developed and owned by MT

# SDMX metadata maintenance

- Define data structures
- Define data exchanges
- Provide qualitative information
- And more...
  - Mapping rules, etc.
- How?
  - Web front-end
  - Microsoft Excel (partial)
  - RESTful API
    - Ad-hoc GUIs

# SDMX-powered business functions

- Mapping

- 1-1
- 1-N & N-1
- N-N
- Regex
- Mapping tester

- Validation

- Format
- SDMX Message
- Structure
- Representation
- Duplicates
- Observation status
- Mandatory attributes

- Format conversion

- Edifact
- XML (Specific, 1.0, 2.0 & 2.1)
- XML (Generic, 1.0, 2.0 & 2.1)
- JSON
- CSV
- Time series and flat

# Supports Excel-based reporting

- SDMX metadata to define Excel workbooks and worksheets
- Presentation metadata (for dimensions & attributes)
- Collection & Communication

**LBSN Reporting Template**

Reporting Organisation Id: SA2

Reporting Organisation Name: Saudi Arabian Monetary Agency

Reporting Period: 2019-Q1

Parent country: - please select -

	A	B	C	D	E
2	L_MEASURE	Measure	S	Amounts outstanding / Stocks	
3	L_POSITION	Balance sheet position	C	Total claims	
4	L_INSTR	Type of instruments	A	All instruments	
5	L_REP_BANK_TYPE	Type of reporting institutions	A	All reporting banks/institutions (domestic, foreign, consortium and unclassified)	
6	L_REP_CTY	Reporting country	SA	Saudi Arabia	
8	Counterparty sector			All sectors	
9	Currency type of reporting country			All currencies (=D+F+U)	Domestic currency (ie currency of bank location country)
10	Currency denomination			All currencies	Saudi riyal
11	Counterparty country			Q:S:C:A:TO1:A::A:SA:A:	Q:S:C:A:SAR:D::A:SA:A:
12	International organisations				
13	Unallocated location				
14	Unclassified non-residents				
15	Andorra				
16	United Arab Emirates				
17	Afghanistan				
18	Albania				
19	Armenia				
20	Angola				

## Towards SDMX 3.0

- Improved Microdata support
  - Maintenance of structures
  - Structure wizard
  - Validation, conversion & mapping
- Codelist composition
- Valuelist, etc.

## How is it used by the BIS?

- Maintenance of BIS metadata
  - Including BIS data dictionary
- Drives downstream metadata-driven systems & processes
- Excel reporting templates

## Key takeaways

- Fusion Metadata Registry =
  - The reference tool to maintain SDMX metadata
  - Drives SDMX-based (distributed) systems and processes
- Governance / Usage
  - Developed by renowned SDMX Experts (Metadata Technology)
  - Owned by an SDMX Sponsor (BIS)
  - Used by many members of the SDMX community
  - Available free of charge
- Yearly BIS development / maintenance budget
  - Let us know if your preferred feature is missing!





Thank you!  
Questions?

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