

Statistical Data and Metadata eXchange

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Stocktaking of (reusable) SDMX Tools

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SDMX Catalogue Sources

SDMX.org Tools page

https://sdmx.org/?page_id=4500

Awesome Official Statistics Software

https://github.com/SNStatComp/awesome-official-statistics-software



How to Classify the Tools?

- Functional mapping
- GSBPM statistical lifecycle mapping
 - An idea from the <u>awesome list</u>
- Types of License
- Other important factors:
 - Documentation, Ease of delivery, Maintenance cycle, Quality, Community involvement



Functional Mapping

	Functional Mapping									
Data structure wizard	Data reporting/ dissemination	Manage/ Store Structural metadata	Author Structural metadata	SDMX collection/ provisioning/ validation	Data discovery (DCAT, Schema.org)	Code libraries	Connectors	Transform/ transcode	Data/ref metadata editing	Data visualisation
SDMX Matrix Generator		metauata		validation	Scriema.org)					
DSD Constructor										
Euro-SDMX Registry										
Flex-CB Vis Framework										
Fusion Registry Community										
Fusion Registry Enterprise										
Fusion	readSDMX	rsdmx	.Stat suit	e	SDM	X Central				
Transformer	ILOSTAT Excel Add-in	SDMX Connectors	SDMX converto	SDMX r Experir		x-rest4js	SDMX in Eviews	SDMX Java Suite	SDMX iStat T	oolkit
OpenSDMX pandaSDMX	Mapping assistant	XSD Generato	r SDMX.NI	ET SDMXS	Source SDM	X-RI	SDMX CSPA Transformation	SDMXUSE	SMART	

Generic Statistical Business Process Model Data structure Specify needs Design Build Collect **Process** Analyse Disseminate Evaluate **SDMX Matrix** 3.1 6.1 7.1 8.1 4.1 2.1 Reuse or build 1.1 5.1 Create frame and Gather evaluation Prepare draft Update output Identify needs Design outputs collection Integrate data select sample outputs systems inputs instruments 7.2 3.2 1.2 2.2 4.2 6.2 Produce 8.2 Constructor Reuse or build Consult and Design variable Set up collection Classify and code Validate outputs dissemination Conduct evaluation processing and confirm needs descriptions analysis components products 3.3 7.3 1.3 8.3 6.3 **Euro-SDMX** 2.3 Reuse or build 4.3 Manage release of Establish output Interpret and Agree an action Design collection dissemination Run collection Review and validate dissemination objectives explain outputs plan Registry components products 7.4 2.4 3.4 6.4 Promote Design frame and Configure Apply disclosure Finalise collection Edit and impute Flex-CB Vis Identify concepts dissemination workflows control sample products Framework 1.5 2.5 3.5 5.5 7.5 6.5 Check data Design processing Test production Derive new Manage user Finalise outputs availability and analysis systems variables and units support Fusion Registry 2.6 3.6 1.6 Design production Test statistical Prepare and submit Community systems and Calculate weights business case business process workflow 3.7 5.7 Fusion Finalise production Calculate systems aggregates readSDMX Finalise data files .Stat suite **SDMX Central** Fusion ILOSTAT Excel **SDMX SDMX** SDMX iStat SDMX Java SDMX in sdmx-rest4is Add-in Connectors Toolkit convertor SDMX-RI **SDMXUSE XSD** Generator SDMX.NET SDMXSource pandaSDMX Transformation

Types of License

"Open source"	Permissive software license	Free software license	European Union Public Licence V.1.1	Apache License, Version 2.0	Open source (GPL -3)	LGPL 3.0	MIT license	Proprietary public licence agreement	Proprietary commercial software license
Data Structure Wizard	Flex-CB Visualisation Framework	Fusion Transformer	Mapping Assistant	pandaSDMX	Read SDMX	SDMX- Experiments	SDMX Matrix Generator	Fusion Registry Community	Fusion Registry Enterprise
Euro-SDMX registry	OpenSDMX	DSD Constructor					.Stat suite		? SDMX Central
rsdmx	SDMX Java Suite	ILOSTAT Excel Add-in							
SDMX in EViews		SDMX Connectors for Statistical Software							
SDMX Istat Toolkit		SDMX converter							
SDMXUSE		SDMX.NET							
		SDMXSource							
		SDMX-RI							
		SDMX Transformation							
		SMART							
		XSD Generator							

What are the Gaps in SDMX Tools lists?

Functional

- Data/reference metadata editing
- Data discovery (DCAT, Schema.org)
- Data visualisation
- SDMX collection/provisioning/validation

Statistical lifecycle (relevant to SDMX or VTL)

- Data validation
- Edit and impute, Derivation, Calculate aggregates
- Manage release of dissemination products (time lag, release calendar, etc.)

Also

- Bridging/integration with other standards (DDI, XBRL, JSON-Stat, GSIM)
- Commercial tool integration (Oracle, Microsoft, etc.)
- Necessary upgrades for SDMX 3.0



Food for thought

Addressing the gaps

- Many tools built from motivation, inspiration how to encourage this?
- How to attract funding to upgrade/create tools?
- How to encourage commercial vendors to add SDMX?
- Motivate a threshold for quality and maintenance?

How to showcase the tools?

- Reformat SDMX.org Tools
- Add to the awesome list
- ???

Are you willing to share other reusable SDMX tools?

Send details to <u>secretariat@sdmx.org</u>

