

9th SDMX Global Conference

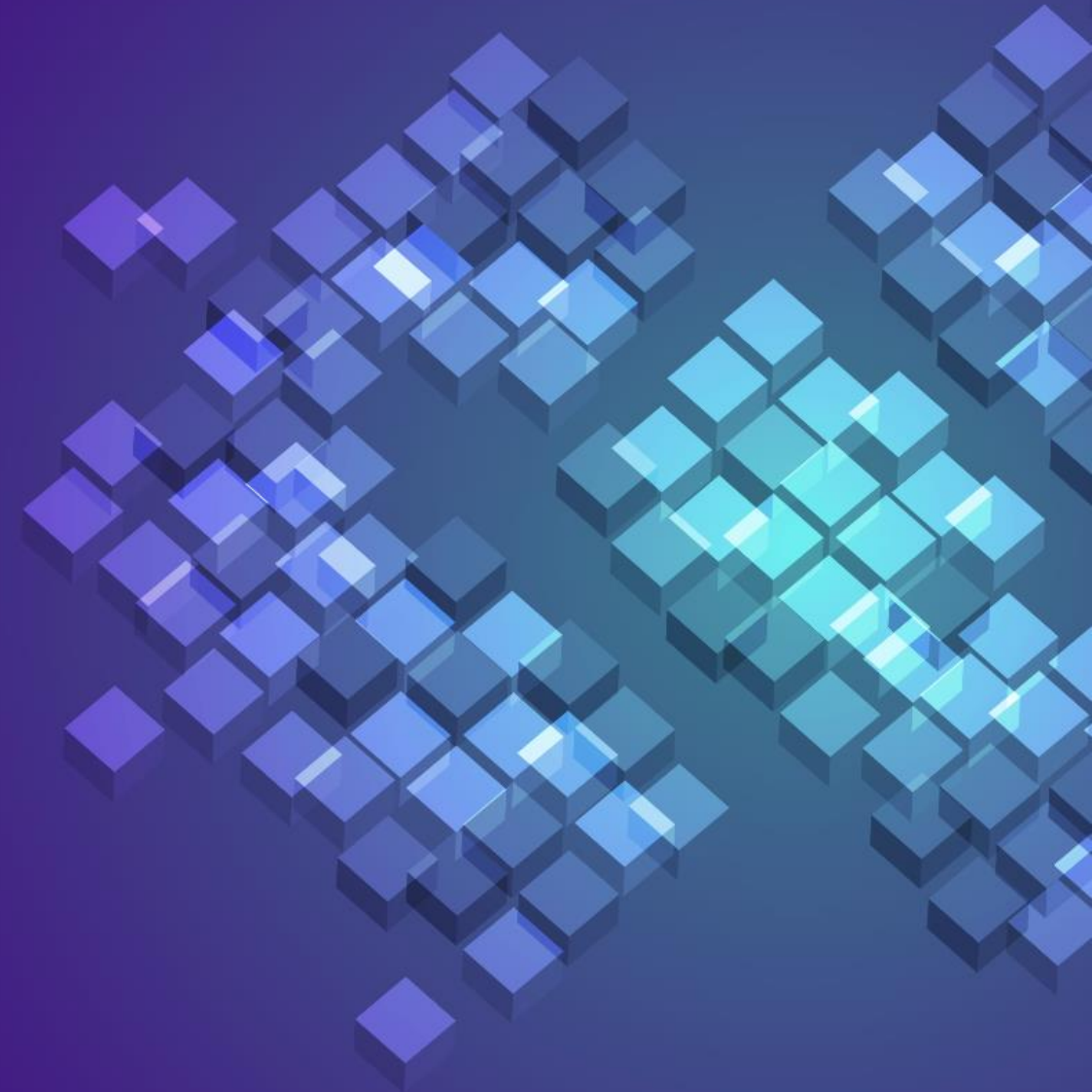
Empowering Data Communities

Unit of measure modelling and harmonisation of unit of measure representation

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on Behalf of SDMX – SWG Unit of Measure Working Group

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Working group members

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Motivation and problem statement

- Unit of Measure ubiquitous
- How the unit of measure assigned matters

→ Measure		Palma ratio	
→ Age group		Total population	
→ Definition		Current definition ⓘ	
→ Year		2017	2018
		▲ ▼	▲ ▼
→ Country	→ Methodology	Unit ⓘ	
Australia	New income definition since 2012 ⓘ	Ratio ⓘ	..
Austria		Ratio ⓘ	0.96
Belgium		Ratio ⓘ	..
Canada		Ratio ⓘ	1.14
Chile		Ratio ⓘ	2.55
Costa Rica		Ratio ⓘ	2.88
			1.3
			0.98
			0.89
			1.11
			..
			2.85

Clearly misleading, users need to read whole methodology

Inconsistency in used codes and labels – scientific units

	National Accounts DSD	Trade DSD	SDG DSD	
Cubic metres (M3)	M3: Cubic metre	MTQ: Cubic Metres	M3: Cubic metre*	
Tonnes (T)	TN: Tonnes (but TCO2E: Tonnes of CO2-equivalent)	TN: Tonnes	T: Metric Tons	

4 * as part of the code included in the code list

Reference points, how do we align ?

- Adopting best practices from the science and engineering
 - The International System of Units (SI)
 - International System of Quantities (ISQ)
 - Unified Code for Units of Measure (UCUM)
- Existing standards give a lot but partly missing some areas
- What is underpinning under these standards ?
 - Applying dimensional analysis
 - Systematic derivation of the new unit of measure for indicators

Unit of measure guidelines

- Best practices for identifying, modelling and managing units of measure
- Guidelines focus on:
 - International standards for units of measure
 - Using dimensional analysis to identify actual unit of measure
 - Unit of measure related concepts and their default representation
 - Types of units of measure
 - Coding and labelling patterns for units of measure
 - Example units of measure used in different domains
 - Combining unit of measure concepts for tool presentation using annotations

Intent of coding/labelling patterns

- Agreed scientific codes
- 2-4 character shortened codes
- “_” as a separator
- PT_(code of measure\relevant breakdowns)

Type	Code	Label	Source
Scientific	H	Hours	SI, ISO/IEC 80000, UCUM and others
	HL	Hectolitres	
Itemisable	PAT	Patients	
	PS	Persons	
Currencies	EUR	Euro	ISO 4217
	USD	US Dollar	
	TRY	Turkish lira	
Derived	H_D	Hours per day	
	H_PS	Hours per person	
	H_WK	Hours per week	
Percentages	PT_POP	Percentage of population	
	PT_POP_AGE	Percentage of population in the same age	

Next steps

- This work is on-going in SWG attached Unit of Measure Task Group
- Consultation process, www.sdmx.org
- The goal is to provide guidelines and codelist (with rules for customization)

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Thank you for your attention!

Questions?

شكرًا لكم على اهتمامكم!

أسئلة؟

