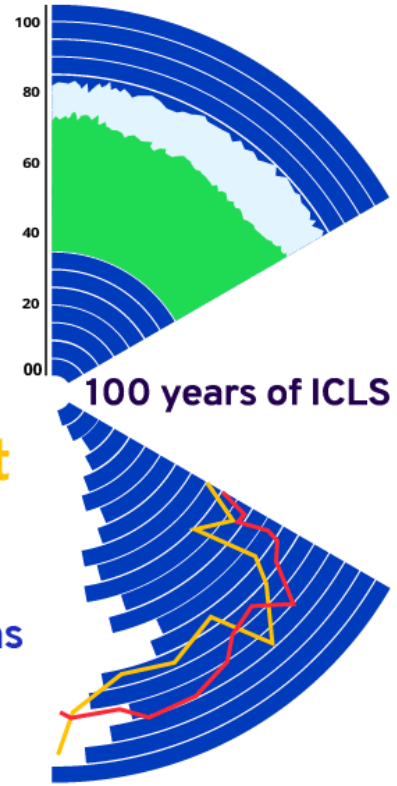
International Labour Organization

21st International Conference of Labour Statisticians

11–20 October 2023



SDMX global data structures for labour statistics

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What's SDMX?

Internationally recognised and supported by

eurostat · International Monetary Fund · Bank for International Settlements · United Nations · The World Bank · OECD · European Union · ILO

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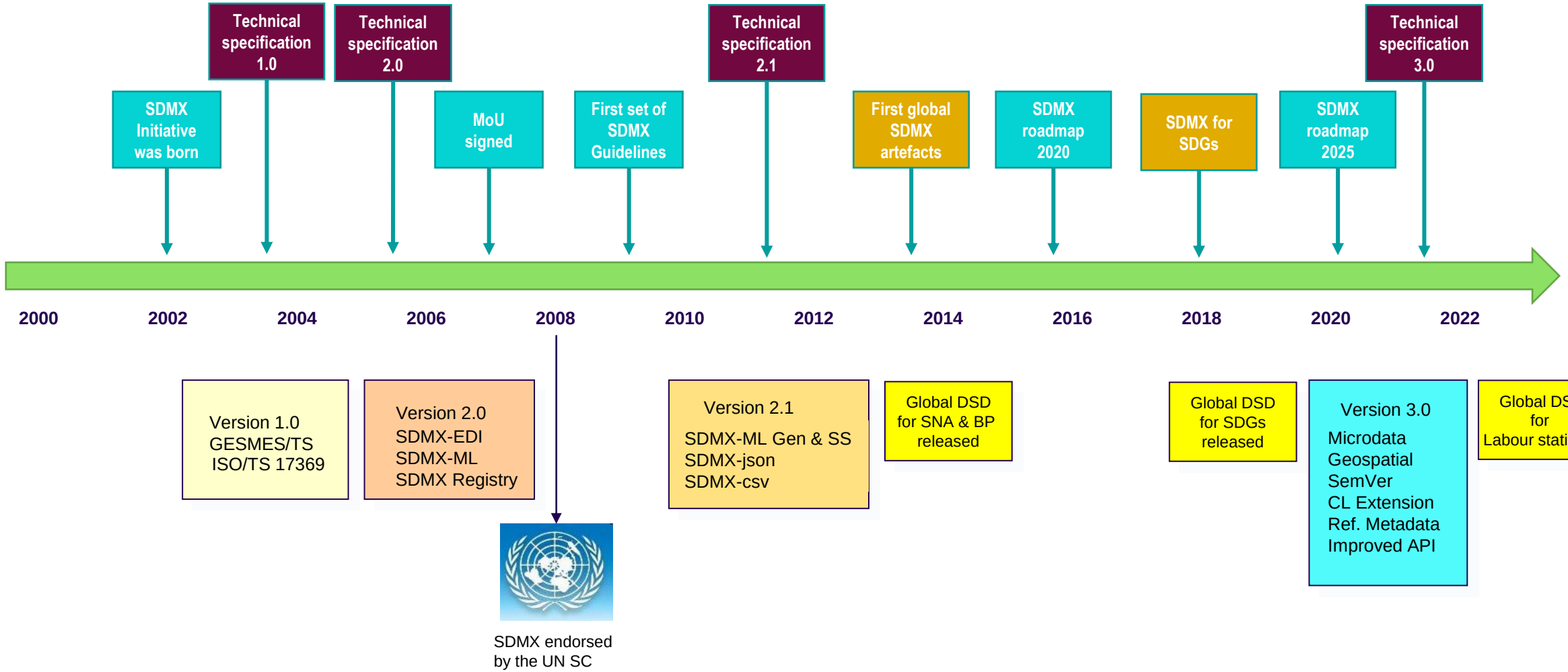
SDMX - Timeline



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SDMX Data Structure Definition (DSD)

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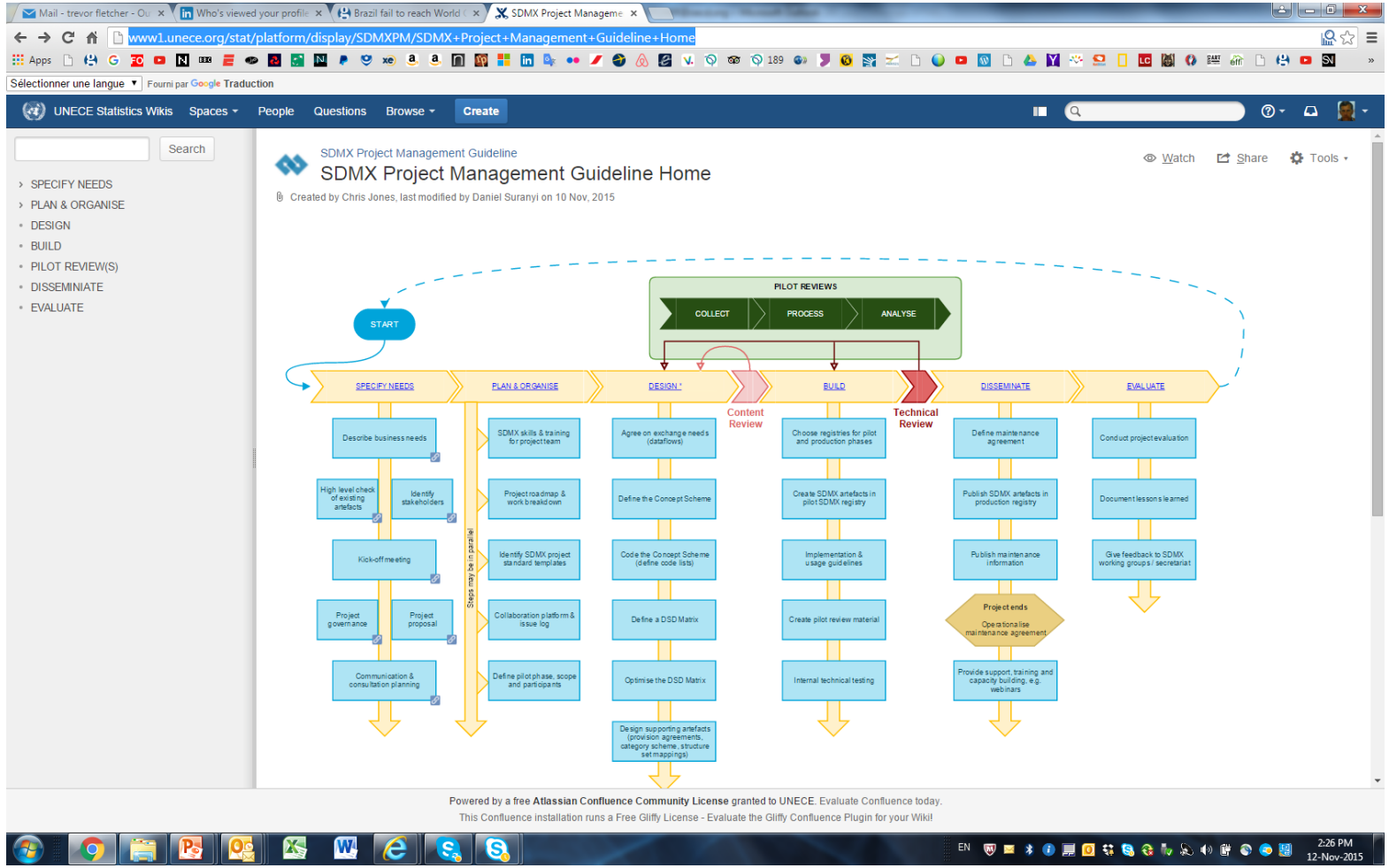
Creating a global DSD



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SDMX Global DSD for Labour Statistics

- Defined by a task force of five international organizations
- Submitted to public revision
- Tested in several existing data exchange processes
- Main DSD for Labour Force statistics data exchange.
  - Additional 5 DSDs for specific data exchange use cases
- LF DSD design characteristics
  - 26 coded dimensions
  - Single “primary” measure (SDMX 2.1 compatible)
  - 26 attributes
- 36 ready-made Dataflows for LF DSD

57
Concepts

38
Codelists

6
DSDs

47
Dataflows and ContentConstraints

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SDMX DSD for Labour statistics concepts – Dimensions & Measure

Dimension (D) Attribute (A) Measure (M)	Concept ID	Concept Name	Code List and Registry Link	Maintenance Agency	Version	Type
D	MEASURE	Measure	CL_MEASURE	ILO	1.0	String
D	AGGREGATION_OPERATION	Aggregation Operation	CL_AGGREGATION_OPERATION	ILO	1.0	String
D	INDICATOR_REF_PER	Reference period of the indicator	CL_FREQ	SDMX	2.0	String
D	HOURS_TYPE	Type of hours	CL_HOURS_TYPE	ILO	1.0	String
D	VALUE_TYPE	Type of value	CL_VALUE_TYPE	ILO	1.0	String
D	UNIT_MEASURE	Unit of measure	CL_UNIT_MEASURE	ILO	1.0	String
D	REF_AREA	Reference area	CL_AREA	IMF	1.9	String
-	-	-	CL_REGIONAL	ESTAT	3.0	String
D	SOURCE_TYPE	Data Source	CL_SOURCE_TYPE	ILO	1.0	String
D	SEX	Sex	CL_SEX	SDMX	2.1	String
D	AGE	Age	CL_AGE	???	1.0	String
D	LABOUR_FORCE_STATUS	Labour force status	CL_LABOUR_FORCE_STATUS	ILO	1.0	String
D	WORKER_STATUS	Status of Worker	CL_WORKER_STATUS	ILO	1.0	String
D	EDUCATION_LEV	Education level (eg, ISCED)	CL_EDUCATION_LEV	UIS	1.0	String
D	ACTIVITY	Economic activity (eg, ISIC)	CL_ACTIVITY	ILO	1.0	String
D	OCCUPATION	Occupation (eg, ISCO)	CL_OCCUPATION	ILO	1.0	String
D	DEG_URB	Degree of urbanisation (residence)	CL_DEG_URB	ILO	1.0	String
D	SEASONAL_ADJUST	Seasonal Adjustment	CL_SEASONAL_ADJUST	SDMX	1.0	String
D	MIGRANT_STATUS	Migrant status	CL_MIGRANT_STATUS	ILO	1.0	String
D	MIGRANT_ORIGIN	Origin of migrant	CL_AREA	ILO	1.0	String
D	NATIONALITY	Nationality	CL_AREA	ILO	1.0	String
D	PROD_UNIT	Type of Production Unit, e.g. Informal, Formal, Household	CL_PRODUNIT	ILO	1.0	String
D	SIZECLASS	Number of persons engaged in the economic unit	CL_SIZECLASS	ILO	1.0	String
D	EARNINGS_CASE	Earnings case	CL_EARNINGS_CASE	ILO	1.0	String
D (Time)	TIME_PERIOD	Time period	Uncoded			OTP
D (Frequency)	FREQ	Frequency	CL_FREQ	SDMX	2.0	String
D	COMPOSITE_BREAKDOWN	Composite breakdown	CL_COMPOSITE_BREAKDOWN	ILO	1.0	String
M	OBS_VALUE	Observation value	Uncoded			Alphanumeric

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SDMX DSD for Labour statistics concepts - Attributes

Dimension (D) Attribute (A) Measure (M)	Concept ID	Concept Name	Code List and Registry Link	Maintenance Agency	Version	Type
A (observation)	CURRENCY	Currencies	CL_CURRENCY	SDMX	1.0	String
A (observation)	CONF_STATUS	Confidentiality status	CL_CONF_STATUS	SDMX	1.2	String
A (series)	DECIMALS	Decimals	Uncoded	SDMX		Integer
A (observation)	OBS_STATUS	Observation status	CL_OBS_STATUS	SDMX	2.1	String
A (observation)	COMPOSITE_BREAKDOWN_PFX	Composite breakdown in use	CL_COMPOSITE_BREAKDOWN_PFX	ILO	1.0	String
A (observation)	UNIT_MULT	Unit multiplier	CL_UNIT_MULT	SDMX	1.1	Integer
A (series)	DATA_COMP	Data compilation	Uncoded			String
A (series)	COMMENT_TS	Detailed description of the group of series	Uncoded			String
A (observation)	COMMENT_OBS	Comments to the observation value	Uncoded			String
A (dataset)	COMMENT_DSET	Comments on dataset level	Uncoded			String
A (observation)	TIME_PER_COLLECT	Time period collection	CL_TIME_PER_COLLECT	SDMX	1.0	String
A (observation)	DISS_ORG	Organisation disseminating the data being reported.	CL_ORGANISATION	IMF	1.7	String
A (observation)	COMPILING_ORG	Compiling organisation	CL_ORGANISATION	IMF	1.7	String
A (observation)	EMBARGO_TIME	Embargo date and time	Uncoded			DateTime
A (series)	BASE_PER	Base period	Uncoded			DateTime
A (observation)	PRE_BREAK_VALUE	Pre-break value	Uncoded			Double
A (observation)	BREAK_REASON	Reason for break in series	CL_BREAK	ILO	1.0	String
A (observation)	COVERAGE_MAXAGE	Maximum age	CL_COVERAGE_MAXAGE	ILO	1.0	String
A (observation)	COVERAGE_MINAGE	Minimum age	CL_COVERAGE_MINAGE	ILO	1.0	String
A (observation)	COVERAGE_OWN	Ownership sector	CL_COVERAGE_OWN	ILO	1.0	String
A (observation)	COVERAGE_GEO	Geographical coverage	CL_COVERAGE_GEO	ILO	1.0	String
A (observation)	COVERAGE_ACTIVITY	Economic or other sectors covered by the statistics.	CL_COVERAGE_ACTIVITY	ILO	1.0	String
A (observation)	COVERAGE_SIZECLASS	Economic unit size coverage	CL_SIZECLASS	ILO	1.0	String
A (series)	MEASURE_NOTES1 to MEASURE_NOTES5	Measure notes	CL_MEASURE_NOTES	ILO	1.0	String
A (dataset)	TITLE_STAT_SOURCE	Title of the statistical source	Uncoded			String
A (series)	TITLE_TS	Title	Uncoded			String

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Advantages of SDMX Global Artefacts

- Facilitate interoperability
- De facto agreement on the structure of the data to be exchanged
- Alignment with international standards
- Agreement on concepts to be included in the data structure and their code lists
- Homogeneous set of descriptive metadata

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Points for reflection

Participants in the Conference are invited to reflect on:

- the relevance of using **SDMX** to **reduce the reporting burden** for statistics
- the importance of using the **global artefacts** to **facilitate data exchange** of labour-related statistics
- the possibility of referring to the **global artefacts** when **designing** their **data exchange operations**.