



# Towards a Data Structure Definition for property prices and related indicators

Bianca Ligani, Robert Szemere, Bank for International Settlements  
SDMX Global Conference 2023

## Overview

1. Goal
2. Scope
3. Participants
4. Principles
5. Timeline
6. Agreed dimensions and attributes
7. Pilot

# 1. Overarching goal

- A single *language* for all dataflows among stakeholders
  - Statistical Offices
  - Central Banks
  - International Organisations
- Reduce the necessity of reporting the same dataset to different stakeholders in different structures
- A step towards data pulling from a repository

## 2. Scope

### First phase

- Residential and Commercial Property Price Indicators
- Metadata structure definition: concepts, coverage, principles

### Second phase - tentative

#### Related indicators

- Structural indicators: Transactions, Stocks, Starts/completions, etc
- Composite financial indicators: Price to income ratio, Price to rent ratios, etc

### 3. Participants

Design of the DSDs  
SDMX sponsor international  
organisations

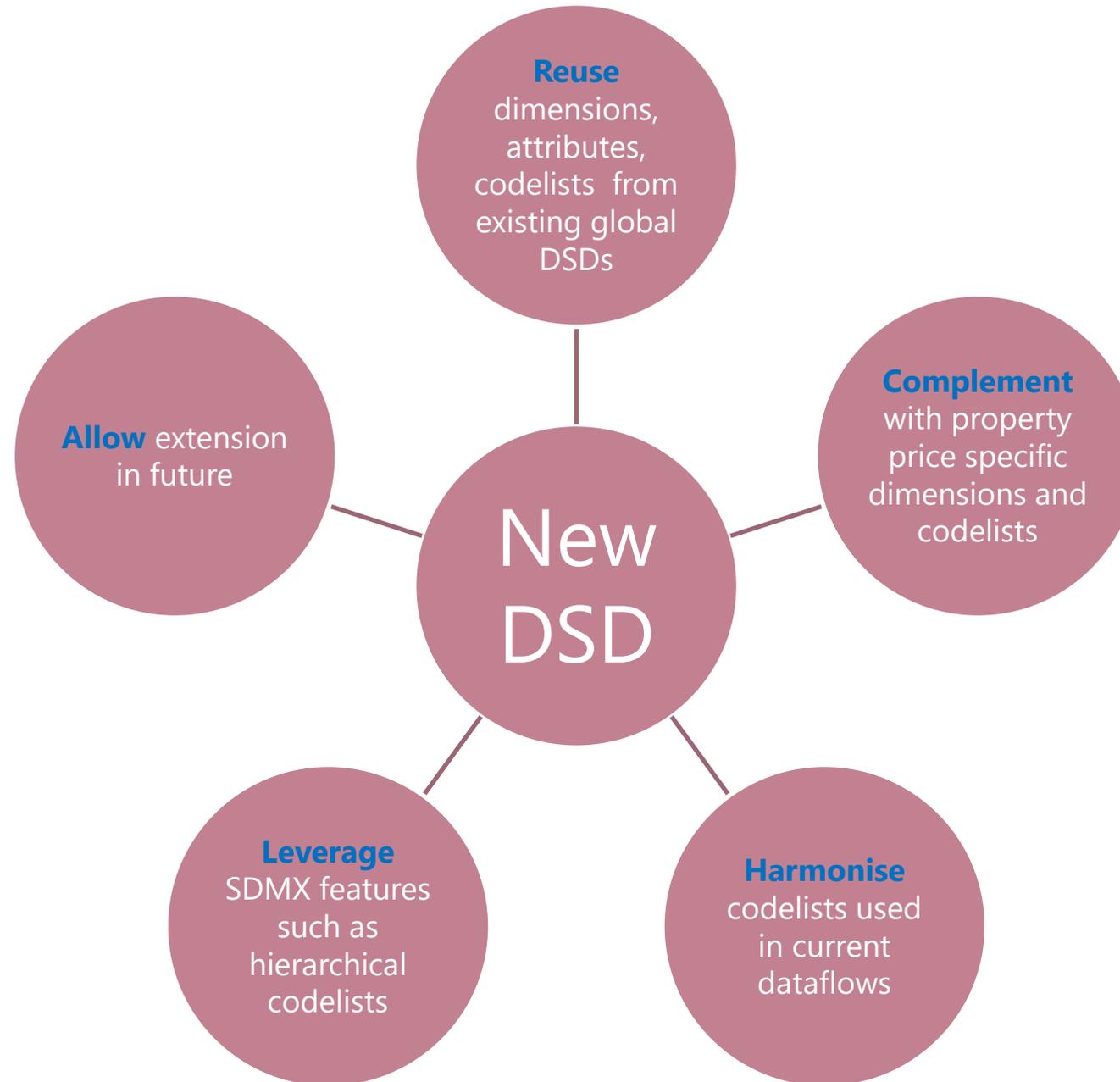
- BIS
- Eurostat
- IMF
- OECD

Chair: BIS (Robert Szemere)  
Secretary: BIS (Bianca Ligani)

Pilot transmissions

- NSIs, NCBs

## 4. Principles



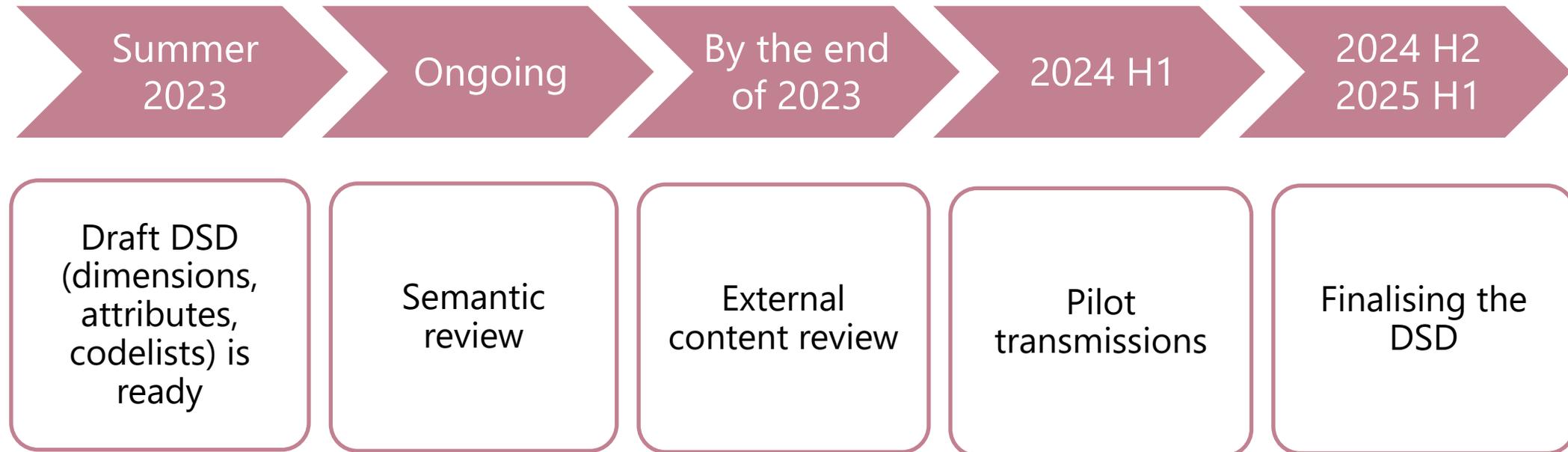
## 4. Reuse in practice: elements of the CPI DSD (as closest 'relative')

Dimensions
[FREQ] Frequency of observation
[SEASONAL_ADJUST] Seasonal adjustment
[REF_AREA] Reference area
[IND_TYPE] Indicator type
[IDX_TYPE] Index type
[BASE_PER] Base period
[ITEM] Item in the classification
[COVERAGE_GEO] Geographical coverage
[COVERAGE_POP] Population coverage
[UNIT_MEASURE] Unit of measure
[TRANSFORMATION] Time transformation
[CUST_BREAKDOWN] Custom breakdown
[TIME_PERIOD] Time period
Primary Measure
[OBS_VALUE] Observation value
Dataset Attributes
[COMMENT_DSET] Comments on dataset level

Series Attributes
[DISS_ORG] Dissemination organisation
[COMPILING_ORG] Compiling agency
[DATA_COMP] Data compilation
[LAST_UPDATE] Data Update – Last Update
(M) [UNIT_MULT] Unit multiplier
[TITLE] Title
[TIME_PER_COLLECT] Time period collection
(M) [TIME_FORMAT] Time format
[COMMENT_TS] Comments on series level
[REPYEAREND] Reporting year end day
[REPYEARSTART] Reporting year start day
[CUST_BREAKDOWN_LB] Custom breakdown label
[IND_BASE_PER] Base period of the weight
[BASE_PER_START] Base period start
[BASE_PER_END] Base period end

Observation Attributes
[PRE_BREAK_VALUE] Observation pre-break value
(M) [OBS_STATUS] Observation status
(M) [DECIMALS] Decimals
[CONF_STATUS] Confidentiality status
[COMMENT_OBS] Comments to the observation value
[EMBARGO_TIME] Embargo time

## 5. Timeline



## 6. Agreed dimensions

Concept Name	Concept Description	Examples
Frequency of observation	Time interval at which observations occur over a given time period	M, Q, A
Adjustment	Statistical technique used to remove the effects of seasonal and calendar influences operating on a data series	NSA, SA, Trend adjusted
Reference area	Country or geographic area to which the measured statistical phenomenon relates	LU, EU. Euro area
Vintage	First or repeated sales of property	New dwelling, Existing dwellings
Property type	Properties covered	All residential, Flats, Offices, Retail
Type of area	Defines type of region or city	Major Cities, Capital, Whole country
Name of geographic area	Name of city or region	Oslo, Bludenz-Bregenz Wald
Market segment	Category of location	Prime, non-prime location
MEASURE	Index, per dwelling or square meter	Nominal index, Price per square meter
Unit	Unit	EUR, Index
Information type	Type of information used for compilation	Transactions, Valuations
Transformation	Original data or growth	Growth rate, over 1 year
Dissemination organisation	The organisation disseminating the data	Eurostat, Statistics Finland

## 6. Agreed attributes

Name	Level(s)	Status
Unit multiplier	Series	Optional
Comment	Observation, series, data set	Optional
Compilation	Series, data set	Mandatory
Base period	Series	Mandatory
Decimal	Series	Mandatory
Confidentiality	Observation, series, data set	Mandatory
Break reason	Series	Optional
Pre-break observation value	Observation	Optional
Title	Series	Mandatory
Observation status	Observation	Mandatory
Description of regional breakdown	Series	Optional

## 7. Call for pilot transmission volunteers

### Role of volunteers

1. Transmit data with the new draft DSD
2. Send comments, suggestions in case the DSD does not accommodate easily their data

Thank you!!

