



SDMX for SDG Indicators

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What is Statistical Data & Metadata eXchange?

“Set of technical standards and content-oriented guidelines, together with an IT architecture and tools, to be used for the efficient exchange and sharing of statistical data and metadata.”(MCV 2009)





What is Statistical Data & Metadata eXchange?

- A model to describe statistical data and metadata
- A standard for automated communication from machine to machine
- A technology supporting standardised IT tools

In order to take advantage of all this:

- Statisticians agree to use a common description for data and metadata in a particular domain
- The data exchange process is then driven by the common description
- Data descriptions are made available for everybody who wants to understand and reuse the data

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SDMX for Development Indicators

- Dates back to 2007 when the Interagency and Expert Group for MDG Indicators established an SDMX Task Team
- Data and metadata exchange on development indicators between UNSD and 11 countries
 - As part of the UNSD-DFID Project on MDGs (2010-2015); a further 4 countries joined exchange later
 - Facilitated comparison and analysis of national and international MDG indicators

<http://data.un.org/countryData>

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SDMX-SDGs Working Group

- Working Group on SDMX for SDG Indicators established by IAEG-SDGs in April 2016
- First meeting in October 2016

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SDMX-SDGs: Who?

- Working Group composed of 12 countries, 10 international agencies
- Chaired by Colombia
- UNSD acts as the Secretariat

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SDMX-SDGs: What?

- Develop global Data Structure Definition(s) and Metadata Structure Definition(s) for SDG Indicators
 - Standards for the packaging of SDGs data and metadata including concepts, codes, structures
- Develop, pilot, and establish data exchange mechanisms for SDG indicators
 - Dissemination and reporting at national, regional, global level

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SDMX-SDGs: When?

- Draft DSD(s): 2017Q3
- Pilot data exchange: 2018Q1
- Production data exchange: 2018Q4

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SDMX for SDGs: Why?

- Uniform data model
 - Read and correctly interpret SDGs data from any source: national, regional, global
- Uniform data access and dissemination
 - SDMX-based API: JSON, XML, soon to come CSV
- Greatly reduced reporting burden
- Common tools, visualizations, platforms...

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SDGs Data and Visualization Platform

- At the moment, built from data submitted by international agencies
- To be implemented: exchange with national and regional agencies and publication of their data at the platform
 - With support provided by the UK Department for International Development

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National and International Data

- As at the CountryData platform, national and international data **and metadata** will be compared and analyzed
 - Greatly simplified by SDMX
 - Reasons for differences: see metadata!
- Once ready, all countries will be invited to submit their data to the platform
- Data exchange with 20 countries funded through the new UNSD-DFID SDGs Project

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SDMX Tools

- Eurostat, Istat, and other agencies produce SDMX tools that have greatly simplified and reduced the cost of implementation
- SDGs Database already built on SDMX
 - Generic SDMX tools made it possible to create a database of >300,000 records, from series unknown in advance, within <8 weeks in time for the inaugural 2016 SDGs Report
- More tools are on the way to further reduce cost and increase productivity

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SDGs at UNdata API

- Interim DSD is used to disseminate SDGs in SDMX
 - XML by default; JSON is now also supported
- Return data for *Population below international poverty line...*

http://data.un.org/ws/rest/data/DF_UNDATA_SDG/.SI_POV_DAY1...../

```

- <message:GenericData>
  <message:Header><message:Header>
  - <message:DataSet action="Information" structureRef="UNSD_SDG_PROV_1_0">
    - <generic:Series>
      - <generic:SeriesKey>
        <generic:Value id="FREQ" value="A"/>
        <generic:Value id="SERIES" value="SI_POV_DAY1"/>
        <generic:Value id="UNIT" value="PERCENT"/>
        <generic:Value id="LOCATION" value="T"/>
        <generic:Value id="AGE_GROUP" value="000_099_Y"/>
        <generic:Value id="SEX" value="T"/>
        <generic:Value id="REF_AREA" value="AGO"/>
        <generic:Value id="SOURCE_TYPE" value="NA"/>
      - <generic:SeriesKey>
    - <generic:Obs>
      <generic:ObsDimension id="TIME_PERIOD" value="2000"/>
      <generic:ObsValue value="32.28"/>
    - <generic:Attributes>
      <generic:Value id="UNIT_MULT" value="0"/>
      <generic:Value id="NATURE" value="G"/>
      <generic:Value id="FOOTNOTES" value="Consumption based. Urban only."/>
    - <generic:Attributes>
  - <generic:Obs>
    <generic:ObsDimension id="TIME_PERIOD" value="2008"/>
    <generic:ObsValue value="30.13"/>
  - <generic:Attributes>

```

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For further information...

- SDMX events, tools, development, learning
 - <http://sdmx.org>
- Eurostat's SDMX Info Space
 - <http://ec.europa.eu/eurostat/web/sdmx-info-space/welcome>
- UNdata SDMX API, including SDGs
 - <http://data.un.org/WS>
 - <http://data.un.org/SdmxBrowser>
- CountryData
 - <http://data.un.org/CountryData>
- SDMX Global Registry
 - <http://registry.sdmx.org>

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THANK YOU

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