

Global Data Structure Definition (DSD) for International Merchandise Trade Statistics

Statistical Data and Metadata eXchange (SDMX) for International Merchandise Trade Statistics (IMTS)

<http://comtrade.un.org/sdmx>

What is Statistical Data and Metadata eXchange (SDMX)?

The Statistical Data and Metadata eXchange (SDMX) initiative aims to set statistical and technical standards to facilitate the exchange of statistical data and metadata using modern information technology.¹ SDMX is an ISO standard designed to describe statistical data and metadata, normalise their exchange, and improve their efficient sharing across statistical and similar organisations. A number of member states and organizations are involved in developing these standards for various domains of official statistics.

SDMX consists of:

- Technical standards (including Information Model),
- Statistical guidelines, and
- An IT architecture and tools.

SDMX is, however, more than a format for data exchange. Together, the technical standards, the statistical guidelines, and the IT architecture and tools can support improved business processes for any statistical organisation.

What is Data Structure Definition (DSD)?

A Data Structure Definition (DSD) is a central component of the SDMX. It specifies:

1. A set of *concepts* (concept scheme) which describe and identify a set of data. These concepts are of three types; *dimensions* are concepts which both identify and describe data (such as Time period), *attributes* are concepts which only describe the data (such as Trade system), and *measurements* represent value of specific observation. Within a dataset, combination of dimensions must be unique, but not for attributes.
2. The attachment level of both dimension and attribute (at the level of Data Set, Group, Series/Section, Observation), as well as their status (mandatory or conditional).
3. Code lists which provide acceptable values for the concepts in their proposed standard coding and formatting.

A data structure definition can be used to describe time series data, cross-sectional and multidimensional table data.²

DSD for IMTS

A globally agreed and adopted DSD in any domain of official statistics is instrumental in facilitating the exchange of statistical data using modern information technology minimising the need for human intervention. With this in view, an inter-agency working group comprising of Eurostat, the International Trade Centre (ITC), the Organization for Economic Cooperation and Development (OECD), the United Nations Statistics Division (UNSD), and the United Nations Conference on

¹ <http://www.sdmx.org>

² https://webgate.ec.europa.eu/fpfis/mwikis/sdmx/index.php/Main_Page

Trade and Development (UNCTAD) have prepared a proposed DSD for International Merchandise Trade Statistics (IMTS).

Under the overall DSD, three different DSDs each of which uses a different subset of the main DSD concepts have been proposed for the purposes of: i) data collection, ii) public dissemination, and iii) aggregate dissemination.

Global DSDs for other statistical domains (e.g., System of National Accounts or Balance of Payments) including their concept schemes and code lists are available at <https://registry.sdmx.org/>. To the extent possible, IMTS DSD reuses concepts and code lists that have been agreed internationally.

Review of the IMTS-DSD and what is expected

The working group initiated a review of the proposed Global DSD for IMTS. With regard to the content of the IMTS-DSD, the review should cover the concepts (as described earlier) and the associated code lists. The review will be conducted through a survey which one can take online (preferred mode of submission and more user friendly) at the link provided in the email to potential respondents or by filling the pdf version provided in the same email. The survey has been especially designed to capture your feedback on the IMTS-DSD.

If you did not receive the email but wish to contribute to the review, please write to tradestat@un.org with your request.

We expect the review to cover the following aspects, which are reflected in the questionnaire:

- Concepts (dimensions and attributes): How do the concepts defined apply to your practices? Is there any gaps?
- Code lists: Are the code lists of all concepts comprehensive and appropriate? Is there a need to omit/include/modify any category?
- Implementation of SDMX: What are the challenges and requirements in your view?

We would be grateful to receive all responses to the survey by **15 June 2015**.

Relevant documents for the review/ contents of the attached package

The package contains:

1. Business case for transmitting IMTS data via SDMX
2. A fillable PDF version of the survey
3. An Excel workbook with Version 0.5 (V00_5) of the IMTS-DSD
4. Excel workbooks with the following coding examples in the IMTS-DSD form. These examples serve as tentative guidelines:
 - Basic data: how to encode FOB value, supplementary quantity units, and net weight. Reporter specific commodity codes are also illustrated.
 - Commodity custom breakdown: more details about how to send reporter specific commodity codes using the IMTS-DSD, these include HS codes past 6-digits.
 - Confidential data: how to encode confidential commodity information and/or confidential trading partners. Formats exist for:
 - Sending the data to external agencies: indicating confidentiality, but not transmitting any confidential information.

- Sending the data to trusted and/or internal partners: indicating confidentiality, but still transmitting confidential information for use by the trusted party.
- Multiple commodities: how to provide alternative commodity encoding, for instance transmitting data in both HS 2012 and SITC Rev 4 simultaneously.