

# **Regional Training Workshop on Economic Statistics SDMX**

24-28 February 2020, Manila, Philippines

Concept Note & Agenda Draft as of 04 Nov 2019

## BACKGROUND

SDMX, which stands for Statistical Data and Metadata eXchange, is an ISO standard (17369) designed to describe statistical data and metadata, normalize their exchange, and improve their efficient sharing across statistical and similar organizations<sup>1</sup>. It provides an integrated approach to facilitating statistical data and metadata exchange, enabling interoperable implementations within and between systems concerned with the exchange, reporting and dissemination of statistical data and their related meta-information. Further, SDMX was recognized and supported as a preferred standard for the exchange and sharing of data and metadata by UN Statistical Commission in 2008 (Decision 39/112 point (b)<sup>2</sup>).

SDMX for International Merchandise Trade Statistics. An inter-agency working group consisting 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 Trade and Development (UNCTAD) was established in 2013 with the purpose of specifying uniform structures, concept definitions and code lists for the transmission of IMTS data and metadata in accordance with SDMX. The working group, chaired by UNSD, had developed a first version of the Global Data Structure Definition (DSD) of SDMX standards for International Merchandise Trade Statistics (IMTS) in consultation with member countries in 2016. The DSD was submitted to SDMX Secretariat in early 2017 for review; and subsequently made public at UNSD website<sup>3</sup>. In September-October 2017, UNSD conducted two pilot implementation projects in Mexico and Morocco resulting to amendment of DSD to the version 1.1 (2018). UNSD and AUC undertook SDMX-IMTS regional training workshops for African countries in September 2018 and February 2019. The workshop aimed to introduce global DSD of SDMX-IMTS and train staff of National Statistical Offices in data mapping and utilizing SDMX tools.

*SDMX for System of National Accounts.* The adoption of the System of National Accounts (SNA) 2008 the work on the associated transmission programmes created a new momentum for the alignment of international standards for the compilation and dissemination of macro-economic statistics. The SDMX sponsors (BIS, ECB, Eurostat, IMF, OECD, United Nations and World Bank) mandated the ECB, Eurostat and the OECD to propose Data Structure Definitions (DSDs) to implement SDMX in National Accounts according to the SNA 2008. This DSD is now available on the SDMX registry for: main

<sup>&</sup>lt;sup>1</sup> See <u>https://www.sdmx.org</u>

<sup>&</sup>lt;sup>2</sup> See <u>https://unstats.un.org/unsd/statcom/39th-session/documents/statcom-2008-39th-report-E.pdf</u>

<sup>&</sup>lt;sup>3</sup> See <u>https://comtrade.un.org/sdmx</u>

national accounts aggregates, sector accounts, Supply-Use & Input-Output tables, and Government Finance Statistics. The international organisations involved in collecting national accounts data have commenced the exchange of this data using SDMX and are promoting the use of SDMX for country reporting in order to minimise burden.

In this regard, UNSD in collaboration with ADB, ASEAN, and EU-ASEAN ARISE project will conduct a Regional Training Workshop on Economic Statistics SDMX targeting 10 Southeast Asia countries.

## OBJECTIVES

The main objectives of the training workshop are to:

- Introduce general concepts of SDMX including technical specification, contentoriented guidelines and implementation tools to compilers of SNA and IMTS
- Train subject matters experts on specific global SDMX Data Structure Definitions of SNA and IMTS; and teach IT experts on various SDMX tools
- Assist both statisticians and IT experts in implementing SDMX by conducting mapping exercise between national database and SDMX code lists for specific domain
- Identify interested and capable institutions/countries as SMDX pilot implementation projects in 2020-2021

## PARTICIPANTS OF THE WORKSHOP

The workshop will bring together the subject matter and IT experts from institutions responsible in the compilation of SNA and IMTS in Southeast Asia region. Interested regional organizations in Asia will be also attending the workshop.

Subject matter experts should have few years of hands-on experiences in the data compilation for respective domains and possess depth knowledge on data structures and variables.

IT experts should have knowledge of relational database including writing SQL queries. Experience in using SQL Server is preferable.

## CONTACT PERSONS

For further information, please contact

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## Draft Agenda

- Opening Session Welcome remarks
- Adoption of agenda -

	Day 1	Day 2	Day 3	Day 4	Day 5
	Introduction to	Hands-on:	Self-Paced	Putting them	Conclusion
	SDMX	Generic Data and	Hands-on Exercise	together –	
		IT Tools	– Own Data	Generating SDMX	
9:00-10:45	What is SDMX?	Overview of IT	Generic Data	Own Data	Continuation of self-
	- Information Model	Tools + Installations	Preparation and	Preparation and	pace hands-on
	- Content-Oriented		Mapping (continue)	Mapping	
	Guidelines	Step-by-step hands-			Round table
	- IT architecture	on demo generating	Track 1: IMTS		discussions
		SDMX output	Track 2: SNA		
11:00-12:30	Overview of SDMX	(Generic DSD):	Track 3: IT	Track 1: IMTS	Summary of work
	objects	- Data preparation		Track 2: SNA	done
	- Concept Scheme	- Data mapping			
	- Code lists	- Generate output		- Prepare data sets	Way forward
	- Data structure			- Apply data	
	definition			mapping	
				- Use mapping	
14:00-15:15	Parallel Sessions	Generic Data	Own Data	assistant	
	Global DSDs:	Preparation and	Preparation and	- Use "Test Client"	
	Introduction,	Mapping	Mapping	tool	
	Artifacts, Mapping				
15:30-17:00	1			Use "SDMX web	
	Track 1: IMTS	Track 1: IMTS		services" (optional)	
	Track 2: SNA	Track 2: SNA	Track 1: IMTS		
		Track 3: IT	Track 2: SNA		

## **Pre-requisites**

The SDMX workshop consists of two main streams:

1. Methodology split into two sub-streams: SNA and IMTS

2. IT

### Methodology stream:

Methodology requires substantive knowledge of IMTS or SNA statistics concepts including their classifications and national data structure with code lists used by the National Statistical Institute (NSI) and basic knowledge of standard code lists used in SDMX (https://sdmx.org/?page\_id=1498).

#### IT stream:

IT stream requires basic knowledge on the following is recommended:

1. Basic SQL queries

2. Basics of XML (Extensible Mark-up Language) and DSD

- 3. Basic data warehousing concepts (Dimensions, attributes, etc).
- 4. Basic knowledge of IIS (Internet information service) is recommended: Used to host the SDMX web service.

The following IT tools will be used to produce SDMX workshop. Hence a basic idea of these tools and possibly installed on participants' laptop would be recommended. (Please choose .Net or java version depending on your needs).

1. **Mapping assistance:** this module facilitates mapping between the structural metadata provided by an SDMX-ML Data Structure Definition (DSD) and the statistical data of the NSI. <u>Click here to download mapping assistance.</u>

2. **SDMX NSI web service:** Tool to expose the SDMX data of NSI in the SDMX-ML format as SOAP/REST services. <u>Click here to download the SDMX NSI web service.</u>

3. **SDMX test client:** "this module tests the SDMX-RI building blocks and exposes/browses the dissemination environment of NSI". <u>Click here to download the SDMX test client.</u>

4. **SQL management studio:** For managing data from SQL server locally. <u>Click here to download the SQL management studio.</u>