



Data Quality Framework

**United Nations Statistics Division
Regional Workshop on International Merchandise Trade Statistics
Suzhou, China – September 2017**



Data Quality (IMTS 2010 Chapter IX)

- ❖ Enhancing quality of international merchandise trade statistics
- ❖ Measuring quality of international merchandise trade statistics
- ❖ Quality measures and indicators
- ❖ Cross-country data comparability
- ❖ Metadata (considered as part of quality)



Enhancing Quality

- Enhancing data quality is a process covering **all stages** of the statistical production process:
 - starts with **validation** of the data provided by the trader or broker when completing the customs declaration,
 - requires appropriate **institutional arrangements**, for example, in order to allow adequate access to different data sources and
 - implies the appropriate **use of information and communication technology** among many other relevant activities.



Measuring Quality

- Most international organizations and many countries have developed definitions of quality, outlining the various dimensions of quality and quality measurement, and integrated them into quality assessment frameworks
 - ❖ IMF Data Quality Assessment Framework (**DQAF**)
 - ❖ European Statistical System (**ESS**) Code of Practice
 - ❖ **OECD** quality measurement framework
 - ❖ United Nations National Quantity Assessment Framework (**NQAF**)



Quality Dimensions

- **Relevance:** degree to which they meet the user needs)
- **Credibility:** confidence that users place in those statistics)
- **Accuracy:** the degree of closeness estimates to the true values
- **Timeliness:** length of time between the event or phenomenon they describe and their availability
- **Punctuality:** the time lag between the release date of data and the target date on which they were scheduled for release as announced in an official release calendar
- **Methodological soundness:** the application of the available international standards, guidelines and good practices in the production of data
- **Coherence:** Statistics are consistent internally, over time and comparable between regions and countries; it is possible to combine and make joint use of related data from different sources
- **Accessibility:** the ease with which users can obtain the data



Template of Quality

- Based on existing guidelines and reports, template of quality report for IMTS was developed
- This template had been distributed and discussed in several events
- Countries are recommended to start the design of their quality report using this template
 - With addition or amendment, if necessary



Template of Quality

1. RELEVANCE		Relevance is the degree to which statistical outputs meet current and potential user needs. It depends on whether all the statistics that are needed are produced and the extent to which concepts used (definitions, classifications etc.) reflect user needs
1.1.	Statistical information not currently available but needed by users	
		Number of missing variables NUMBER List of missing variables TEXT
		Number of missing variables according to the IMTS 2010 recommended data transmission protocol to UNSD NUMBER List of missing variables TEXT
8. ACCESSIBILITY AND CLARITY		The accessibility of statistical outputs is the measure of the ease with which users can obtain the data. The clarity of statistical outputs is the measure of the ease with which users can understand the data.
8.1.	Please mark data dissemination channels for trade statistics:	
		Paper publications YES/NO (please mention the type of publications) TEXT Interactive web dissemination tool YES/NO (please mention the level of details, e.g. product at 8 digit level*partner country*value*quantity*etc.) TEXT Add hock reports on request by users YES/NO Routine (monthly/annual) data submission to UNSD YES/NO
8.2.	Frequency of data dissemination (e.g. MONTHLY/QUARTERLY/SEMI-ANUUAL/ANNUAL/IRREGULAR)	
8.3.	Are the data provided free of charge to all users? YES/NO	
8.4.	What type of metadata is provided to the users?	



National Compilation and Dissemination Practices Survey 2017

IMTS Survey Survey References

Login

International Merchandise Trade Statistics

Welcome to the 2017 National Compilation and Dissemination Practices (NCDP) survey!



<https://comtrade.un.org/survey/>



National Compilation and Dissemination Practices Survey (NCDP)

The NCDP survey is conducted on a decennial basis by the Inter-Agency Task Force on International Trade Statistics in order to collect **up-to-date** information on **national compilation and dissemination practices** and **compliance with the recommendations contained in IMTS 2010** and the compilation guidance contained in Compilers Manual to IMTS, Rev.1.

All country responses will be made publicly available on the United Nations Statistics Division website.

International Merchandise Trade Statistics National Compilation and Reporting Practices

--- 2006 Survey Results ---

[Introduction](#) | [Research countries](#) | [Research questions](#) | [List of UN recommendations](#)

Question:

Is your national methodology of compilation and dissemination of foreign merchandise trade statistics (hereafter called 'trade statistics') based on IMTS, Rev.2 ?

The United Nations recommendation is: YES

Yes (72%)		
ALBANIA	ANTIGUA, BARB.	ARGENTINA
ARMENIA	AUSTRALIA	AUSTRIA
AZERBAIJAN	BANGLADESH	BELARUS
BELGIUM	BOLIVIA	BOSNIA HERZEG.
BOTSWANA	BRAZIL	BULGARIA
BURUNDI	CAMBODIA	CAMEROON

<https://unstats.un.org/unsd/tradereport/default.asp>



2017 NCDP

Institutional Arrangements

Data sources

Outreach

Linking Trade & Business

Scope and Trade System

Time of recording

Territorial elements

Trade System

Classifications

Quantity

Valuation

Partner Country Attribution

Tools

Quality, Metadata & Data Checking

Trade Indices

Seasonal adjustment

Mode of transport

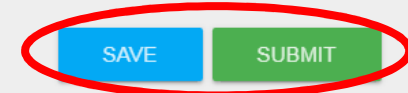
Bilateral asymmetries





2017 NCDP Web Portal

Survey

Search:





Section: General

1.01  Is your national methodology of compilation and dissemination of foreign merchandise trade statistics (hereafter called 'trade statistics') based on IMTS 2010?  **Modified**

- Yes
- No
- Not Applicable

[+ ADD COMMENT](#)

Section: Institutional arrangements

2.01  Is the National Statistical Office the responsible agency for the compilation and dissemination of trade statistics? If No, please specify in the Comments field which agency is responsible for this.  **Unchanged**

- Yes
- No
- Not Applicable

[+ ADD COMMENT](#)