“Strengthening the capacity of Jordan’s Department of Statistics”

Activity 1.3.6: Standardized production process and the role of metadata

Reference Metadata

Mr. Andrea Bruni

ISTAT | Directorate for External Relations, International Affairs, Press Office and National Statistical System Coordination

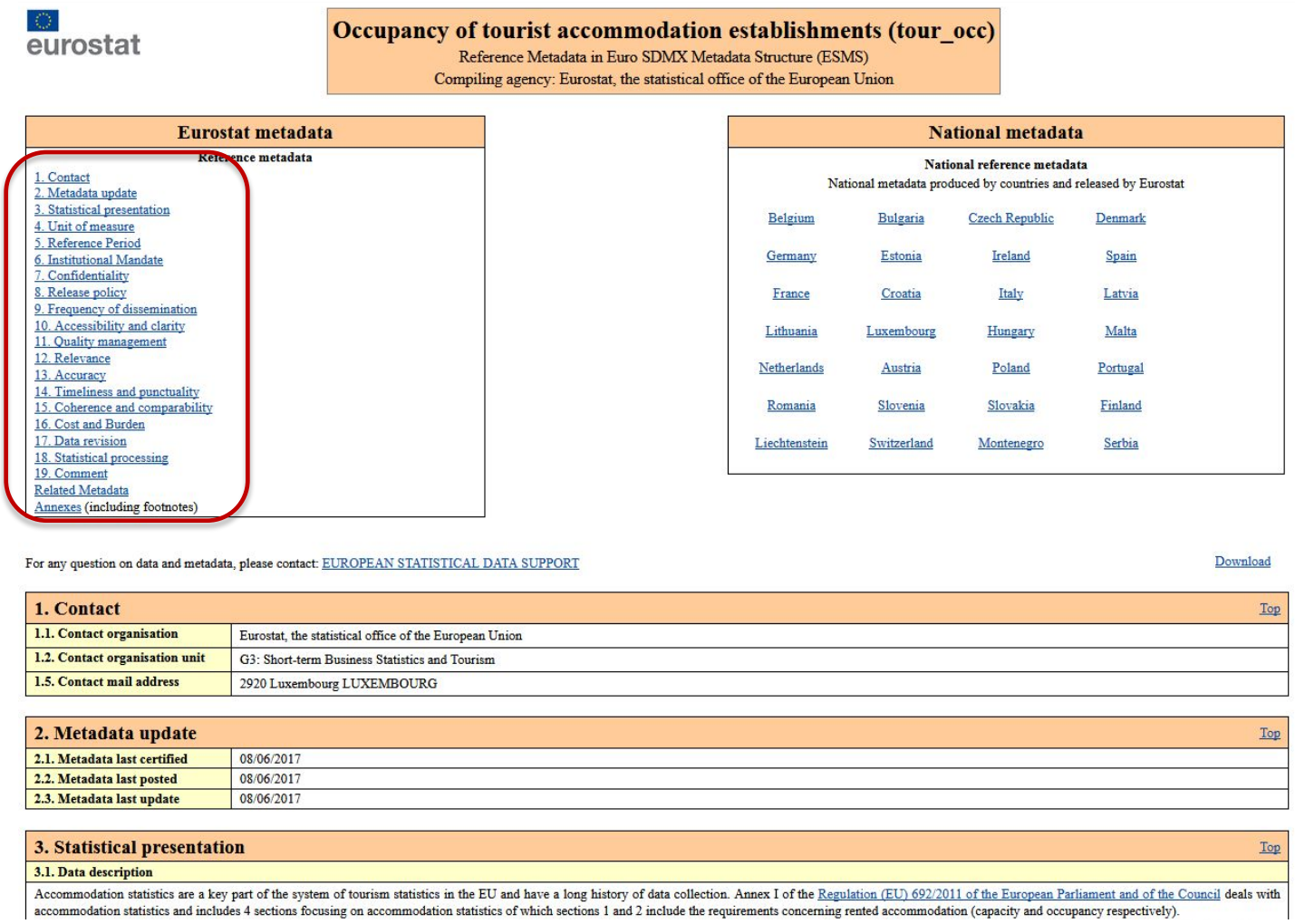
Outline

In the European Statistical System (ESS)

EU metadata report

http://ec.europa.eu/eurostat/cache/metadata/en/tour_occ_esms.htm

~~MSD~~ template



eurostat

Occupancy of tourist accommodation establishments (tour_occ)

Reference Metadata in Euro SDMX Metadata Structure (ESMS)

Compiling agency: Eurostat, the statistical office of the European Union

Eurostat metadata

Reference metadata

1. Contact
2. Metadata update
3. Statistical presentation
4. Unit of measure
5. Reference Period
6. Institutional Mandate
7. Confidentiality
8. Release policy
9. Frequency of dissemination
10. Accessibility and clarity
11. Quality management
12. Relevance
13. Accuracy
14. Timeliness and punctuality
15. Coherence and comparability
16. Cost and Burden
17. Data revision
18. Statistical processing
19. Comment

Related Metadata

Annexes (including footnotes)

National metadata

National reference metadata

National metadata produced by countries and released by Eurostat

Belgium	Bulgaria	Czech Republic	Denmark
Germany	Estonia	Ireland	Spain
France	Croatia	Italy	Latvia
Lithuania	Luxembourg	Hungary	Malta
Netherlands	Austria	Poland	Portugal
Romania	Slovenia	Slovakia	Finland
Liechtenstein	Switzerland	Montenegro	Serbia

For any question on data and metadata, please contact: EUROPEAN STATISTICAL DATA SUPPORT

Download

1. Contact Top

1.1. Contact organisation	Eurostat, the statistical office of the European Union
1.2. Contact organisation unit	G3: Short-term Business Statistics and Tourism
1.5. Contact mail address	2920 Luxembourg LUXEMBOURG

2. Metadata update Top

2.1. Metadata last certified	08/06/2017
2.2. Metadata last posted	08/06/2017
2.3. Metadata last update	08/06/2017

3. Statistical presentation Top

3.1. Data description

Accommodation statistics are a key part of the system of tourism statistics in the EU and have a long history of data collection. Annex I of the Regulation (EU) 692/2011 of the European Parliament and of the Council deals with accommodation statistics and includes 4 sections focusing on accommodation statistics of which sections 1 and 2 include the requirements concerning rented accommodation (capacity and occupancy respectively).

Istat

What is SIMS v2.0?

SIMS v2.0 is a template facilitating harmonised and efficient preparation of both producer and user reports. It includes conceptual, methodological and quality metadata, and also quality and performance indicators.

It is essentially an output-oriented way of viewing a statistical process.

SIMS is can be implemented either directly or through its two derived structures: ESS Standard for Quality Reports Structure (ESQRS), the Euro-SDMX Metadata Structure (ESMS).

SIMS comprises 19 concepts and 80 sub-concepts.
Many are within the list of the standard SDMX cross-domain concepts and are therefore fully SDMX compliant.

SIMS structure

Item No	Concept name
S.1	**Contact**
S.1.1	Contact organisation
S.1.2	Contact organisation unit
S.1.3	Contact name
S.1.4	Contact person function
S.1.5	Contact mail address
S.1.6	Contact email address
S.1.7	Contact phone number
S.1.8	Contact fax number
S.2	**Metadata update**
S.2.1	Metadata last certified
S.2.2	Metadata last posted
S.2.3	Metadata last update
S.3	**Statistical presentation**
S.3.1	Data description
S.3.2	Classification system
S.3.3	Sector coverage
S.3.4	Statistical concepts and definitions
S.3.5	Statistical unit
S.3.6	Statistical population
S.3.7	Reference area
S.3.8	Time coverage
S.3.9	Base period
S.4	**Unit of measure**
S.5	**Reference period**
S.6	**Institutional mandate**
S.6.1	Legal acts and other agreements
S.6.2	Data sharing
S.7	**Confidentiality**
S.7.1	Confidentiality - policy
S.7.2	Confidentiality - data treatment
S.8	**Release policy**
S.8.1	Release calendar
S.8.2	Release calendar access
S.8.3	User access
S.9	**Frequency of dissemination**
S.10	**Accessibility and clarity**
S.10.1	News release
S.10.2	Publications

Item No	Concept name
S.10.3.1	AC1. Data tables - consultations
S.10.4	Micro-data access
S.10.5	Other
S.10.5.1	AC 2. Metadata - consultations
S.10.6	Documentation on methodology
S.10.6.1	AC 3. Metadata completeness - rate
S.10.7	Quality documentation
S.11	**Quality management**
S.11.1	Quality assurance
S.11.2	Quality assessment
S.12	**Relevance**
S.12.1	User needs
S.12.2	User satisfaction
S.12.3	Completeness and R1. Data completeness - rate for U
S.12.3.1	R1. Data completeness - rate for P
S.13	**Accuracy and reliability**
S.13.1	Overall accuracy
S.13.2	Sampling error and A1. Sampling errors - indicators for U
S.13.2.1	A1. Sampling errors - indicators for P
S.13.3	Non-sampling error and A4. Unit non-response - rate for U and A5. Item non-response - rate for U
S.13.3.1	Coverage error
S.13.3.1.1	A2. Over-coverage - rate
S.13.3.1.2	A3. Common units - proportion
S.13.3.2	Measurement error
S.13.3.3	Non response error
S.13.3.3.1	A4. Unit non-response - rate for P
S.13.3.3.2	A5. Item non-response - rate for P
S.13.3.4	Processing error
S.13.3.5	Model assumption error
S.14	**Timeliness and punctuality**
S.14.1	Timeliness and TP2. Time lag - final results for U
S.14.1.1	TP1. Time lag - first results for P
S.14.1.2	TP2. Time lag - final results for P
S.14.2	Punctuality and TP3. Punctuality - delivery and publication for U
S.14.2.1	TP3. Punctuality - delivery and publication for P
S.15	**Coherence and comparability**
S.15.1	Comparability - geographical
S.15.1.1	CC1. Asymmetry for mirror flows statistics - coefficient
S.15.2	Comparability - over time and CC2. Length of comparable time series for U

Item No	Concept name
S.15.3	Coherence- cross domain
S.15.3.1	Coherence - sub annual and annual statistics
S.15.3.2	Coherence- National Accounts
S.15.4	Coherence - internal
S.16	**Cost and burden**
S.17	**Data revision**
S.17.1	Data revision - policy
S.17.2	Data revision - practice and A6. Data revision - average size for U
S.17.2.1	A6. Data revision - average size for P
S.18	**Statistical processing**
S.18.1	Source data
S.18.2	Frequency of data collection
S.18.3	Data collection
S.18.4	Data validation
S.18.5	Data compilation
S.18.5.1	A7. Imputation - rate
S.18.6	Adjustment
S.18.6.1	Seasonal adjustment
S.19	**Comment**

Istat

ESMS (User oriented)

Users need to have access to quality measures and indicators: understand the strengths and limits of statistical data released and to know how to use them properly

Short report, basic level of quality information.

communicate quality to users, report on strengths and limits in order to support a proper use of statistics, enhance transparency

no need for too detailed information on data quality

Basis: ES CoP, principle 15: European Statistics are available and accessible with supporting metadata and guidance

Euro-SDMX Metadata Structure (ESMS)

Item No	Concept Name
1	**Contact**
1.1	Contact organisation
1.2	Contact organisation unit
1.3	Contact name
1.4	Contact person function
1.5	Contact mail address
1.6	Contact email address
1.7	Contact phone number
1.8	Contact fax number
2	**Metadata update**
2.1	Metadata last certified
2.2	Metadata last posted
2.3	Metadata last update
3	**Statistical presentation**
3.1	Data description
3.2	Classification system
3.3	Sector coverage
3.4	Statistical concepts and definitions
3.5	Statistical unit
3.6	Statistical population
3.7	Reference area
3.8	Time coverage
3.9	Base period
4	**Unit of measure**
5	**Reference period**
6	**Institutional mandate**
6.1	Legal acts and other agreements
6.2	Data sharing

Item No	Concept Name
7	**Confidentiality**
7.1	Confidentiality - policy
7.2	Confidentiality - data treatment
8	**Release policy**
8.1	Release calendar
8.2	Release calendar access
8.3	User access
9	**Frequency of dissemination**
10	**Accessibility and clarity**
10.1	News release
10.2	Publications
10.3	On-line database
10.4	Micro-data access
10.5	Other
10.6	Documentation on methodology
10.7	Quality documentation
11	**Quality management**
11.1	Quality assurance
11.2	Quality assessment
12	**Relevance**
12.1	User needs
12.2	User satisfaction
12.3	Completeness
13	**Accuracy and reliability**
13.1	Overall accuracy
13.2	Sampling error
13.3	Non-sampling error

Item No	Concept Name
14	**Timeliness and punctuality**
14.1	Timeliness
14.2	Punctuality
15	**Coherence and comparability**
15.1	Comparability - geographical
15.2	Comparability - over time
15.3	Coherence - cross domain
15.4	Coherence - internal
16	**Cost and burden**
17	**Data revision**
17.1	Data revision - policy
17.2	Data revision - practice
18	**Statistical processing**
18.1	Source data
18.2	Frequency of data collection
18.3	Data collection
18.4	Data validation
18.5	Data compilation
18.6	Adjustment
19	**Comment**

Istat

ESQRS (Producer oriented)

Support management monitoring: producers need to see the results of earlier production developments and to identify points for improvements

documentation for quality assessment (e.g.: audit and self-assessment)

Detailed, comprehensive, supplemented with (all) quality indicators and focused more on the process, even if following product quality dimensions

Basis: Regulation 223/2009, article 12:
Member States shall provide the Commission (Eurostat)
with reports on the quality of the data transmitted

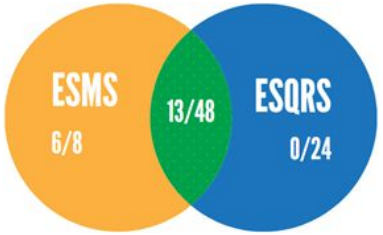
ESQRS (ESS Standard for Quality Reports Structure)

Item no	Concept Name
1	**Contact**
1.1	Contact organisation
1.2	Contact organisation unit
1.3	Contact name
1.4	Contact person function
1.5	Contact mail address
1.6	Contact email address
1.7	Contact phone number
1.8	Contact fax number
2	**Statistical presentation**
2.1	Data description
2.2	Classification system
2.3	Sector coverage
2.4	Statistical concepts and definitions
2.5	Statistical unit
2.6	Statistical population
2.7	Reference area
2.8	Time coverage
2.9	Base period
3	**Statistical processing**
3.1	Source data
3.2	Frequency of data collection
3.3	Data collection
3.4	Data validation
3.5	Data compilation
3.6	Adjustment
4	**Quality management**
4.1	Quality assurance
4.2	Quality assessment
5	**Relevance**
5.1	User Needs
5.2	User Satisfaction
5.3	Completeness
5.3.1	Data completeness - rate

Item no	Concept Name
6	**Accuracy and reliability**
6.1	Accuracy - overall
6.2	Sampling error
6.2.1	Sampling error - indicators
6.3	Non-sampling error
6.3.1	Coverage error
6.3.1.1	Over-coverage - rate
6.3.1.2	Common units - proportion
6.3.2	Measurement error
6.3.3	Non response error
6.3.3.1	Unit non-response - rate
6.3.3.2	Item non-response - rate
6.3.4	Processing error
6.3.4.1	Imputation - rate
6.3.5	Model assumption error
6.4	Seasonal adjustment
6.5	Data revision - policy
6.6	Data revision - practice
6.6.1	Data revision - average size
7	**Timeliness and punctuality**
7.1	Timeliness
7.1.1	Time lag - first result
7.1.2	Time lag - final result
7.2	Punctuality
7.2.1	Punctuality - delivery and publication
8	**Coherence and comparability**
8.1	Comparability - geographical
8.1.1	Asymmetry for mirror flow statistics - coefficient
8.2	Comparability - over time
8.2.1	Length of comparable time series
8.3	Coherence - cross domain
8.4	Coherence - sub annual and annual statistics
8.5	Coherence - National Accounts
8.6	Coherence - internal

Item no	Concept Name
9	**Accessibility and clarity**
9.1	News release
9.2	Publications
9.3	Online database
9.3.1	Data tables - consultations
9.4	Microdata access
9.5	Other
9.6	Documentation on methodology
9.7	Quality documentation
9.7.1	Metadata completeness - rate
9.7.2	Metadata - consultations
10	**Cost and Burden**
11	**Confidentiality**
11.1	Confidentiality - policy
11.2	Confidentiality - data treatment
12	**Comment**

Inter-relationships



S.1	both	**Contact**	S.8.2	ESMS	Release calendar access	S.13.3.3.2	ESQRS	Item non-response - rate
S.1.1	both	Contact organisation	S.8.3	ESMS	User access	S.13.3.4	ESQRS	Processing error
S.1.2	both	Contact organisation unit	S.9	ESMS	**Frequency of dissemination**	S.13.3.5	ESQRS	Model assumption error
S.1.3	both	Contact name	S.10	both	**Accessibility and clarity**	S.14	both	**Timeliness and punctuality**
S.1.4	both	Contact person function	S.10.1	both	News release	S.14.1	both	Timeliness
S.1.5	both	Contact mail address	S.10.2	both	Publications	S.14.1.1	ESQRS	Time lag - first result
S.1.6	both	Contact email address	S.10.3	both	On-line database	S.14.1.2	ESQRS	Time lag - final result
S.1.7	both	Contact phone number	S.10.3.1	ESQRS	Data tables - consultations	S.14.2	both	Punctuality
S.1.8	both	Contact fax number	S.10.4	both	Micro-data access	S.14.2.1	ESQRS	Punctuality - delivery and publication
S.2	ESMS	**Metadata update**	S.10.5	both	Other	S.15	both	**Coherence and comparability**
S.2.1	ESMS	Metadata last certified	S.10.5.1	ESQRS	Metadata - consultations	S.15.1	both	Comparability - geographical
S.2.2	ESMS	Metadata last posted	S.10.6	both	Documentation on methodology	S.15.1.1	ESQRS	Asymmetry for mirror flow statistics - coefficient
S.2.3	ESMS	Metadata last update	S.10.6.1	ESQRS	Metadata completeness - rate	S.15.2	both	Comparability - over time
S.3	both	**Statistical presentation**	S.10.7	both	Quality documentation	S.15.2.1	ESQRS	Length of comparable time series
S.3.1	both	Data description	S.11	both	**Quality management**	S.15.3	both	Coherence - cross domain
S.3.2	both	Classification system	S.11.1	both	Quality assurance	S.15.3.1	ESQRS	Coherence - sub annual and annual statistics
S.3.3	both	Sector coverage	S.11.2	both	Quality assessment	S.15.3.2	ESQRS	Coherence - National Accounts
S.3.4	both	Statistical concepts and definitions	S.12	both	**Relevance**	S.15.4	ESQRS	Coherence - internal
S.3.5	both	Statistical unit	S.12.1	both	User needs	S.16	both	**Cost and burden**
S.3.6	both	Statistical population	S.12.2	both	User satisfaction	S.17	ESMS	**Data revision**
S.3.7	both	Reference area	S.12.3	both	Completeness	S.17.1	both	Data revision - policy
S.3.8	both	Time coverage	S.12.3.1	ESQRS	Data completeness - rate	S.17.2	both	Data revision - practice
S.3.9	both	Base period	S.13	both	**Accuracy and reliability**	S.17.2.1	ESQRS	Data revision - average size
S.4	ESMS	**Unit of measure**	S.13.1	both	Overall accuracy	S.18	both	**Statistical processing**
S.5	ESMS	**Reference period**	S.13.2	both	Sampling error	S.18.1	both	Source data
S.6	ESMS	**Institutional mandate**	S.13.2.1	ESQRS	Sampling error - indicators	S.18.2	both	Frequency of data collection
S.6.1	ESMS	Legal acts and other agreements	S.13.3	both	Non-sampling error	S.18.3	both	Data collection
S.6.2	ESMS	Data sharing	S.13.3.1	ESQRS	Coverage error	S.18.4	both	Data validation
S.7	both	**Confidentiality**	S.13.3.1.1	ESQRS	Over-coverage - rate	S.18.5	both	Data compilation
S.7.1	both	Confidentiality - policy	S.13.3.1.2	ESQRS	Common units - proportion	S.18.5.1	ESQRS	Imputation - rate
S.7.2	both	Confidentiality - data treatment	S.13.3.2	ESQRS	Measurement error	S.18.6	both	Adjustment
S.8	ESMS	**Release policy**	S.13.3.3	ESQRS	Non response error	S.18.6.1	ESQRS	Seasonal adjustment
S.8.1	ESMS	Release calendar	S.13.3.3.1	ESQRS	Unit non-response - rate	S.19	both	**Comment**

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Inter-relationships – specific items

SIMS	ESMS	ESQRS	Concept Name
S.2	x		**Metadata update**
S.2.1	x		Metadata last certified
S.2.2	x		Metadata last posted
S.2.3	x		Metadata last update
S.4	x		**Unit of measure**
S.5	x		**Reference period**
S.6	x		**Institutional mandate**
S.6.1	x		Legal acts and other agreements
S.6.2	x		Data sharing
S.8	x		**Release policy**
S.8.1	x		Release calendar
S.8.2	x		Release calendar access
S.8.3	x		User access
S.9	x		**Frequency of dissemination**
S.17	x		**Data revision**

SIMS	ESMS	ESQRS	Concept Name
S.10.3.1		x	Data tables - consultations
S.10.5.1		x	Metadata - consultations
S.10.6.1		x	Metadata completeness - rate
S.12.3.1		x	Data completeness - rate
S.13.2.1		x	Sampling error - indicators
S.13.3.1		x	Coverage error
S.13.3.1.1		x	Over-coverage - rate
S.13.3.1.2		x	Common units - proportion
S.13.3.2		x	Measurement error
S.13.3.3		x	Non response error
S.13.3.3.1		x	Unit non-response - rate
S.13.3.3.2		x	Item non-response - rate
S.13.3.4		x	Processing error
S.13.3.5		x	Model assumption error
S.14.1.1		x	Time lag - first result
S.14.1.2		x	Time lag - final result
S.14.2.1		x	Punctuality - delivery and publication
S.15.1.1		x	Asymmetry for mirror flow statistics - coefficient
S.15.2.1		x	Length of comparable time series
S.15.3.1		x	Coherence - sub annual and annual statistics
S.15.3.2		x	Coherence - National Accounts
S.17.2.1		x	Data revision - average size
S.18.5.1		x	Imputation - rate
S.18.6.1		x	Seasonal adjustment

Istat

Eurostat implementation process

Preparation

- Initial contact with statistical domain
- Identify specific legal requirements
- Evaluate the current state of play: collection, scope, deadlines
- Consultation with Member States

Compliance

- Analyse the current collection
- Identify domain specific requirements
- **Identify the best reporting structure**
- Mapping of the current collection to the standard
- Validation in the Working Group

Implementation

- SDMX artefacts development
- ESS Metadata Handler set up
- Test file availability
- Pilot project with volunteers
- Training courses schedule

Production

- Users are able to create and send the quality files using the reporting standard and tool
- Domain managers can receive files, analyse and validate them
- Most files will be disseminated on Eurostat website

ESS Handbook on quality and metadata reporting

New edition (2009, 2014, 2020-2021)

The general aim is to provide guidelines for the preparation of producer and user reports for the full range of statistical processes and their outputs within Member States and Eurostat.

EHQMR is fully aligned with SIMS V2.0; includes revised guidelines, examples of reports; updates process typology; gives indication for reporting at national level as well as at European level; clarifies the relationships between SIMS and GSBPM, …

ESS Handbook example

Statistical concepts, definitions, units and populations

SIMS	Concept name	Definition	Guidelines
S.03.4	Statistical concepts and definitions	Statistical characteristics of statistical observations, variables.	Define and describe briefly the main statistical variables that have been observed or derived. Indicate their types. Indicate discrepancies, if any, from the ESS or international standards. Note that any difference between these variables and the variables desired by users is a relevance issue and is discussed in S.12.
S.03.5	Statistical unit	Entity for which information is sought and for which statistics are ultimately compiled.	Define the type of statistical unit about which data are collected, e.g. enterprise, kind of activity unit, local unit, private household, dwelling, person, import transaction. If there is more than one type of unit, define each type.
S.03.6	Statistical population	The total membership or population or "universe" of a defined class of people, objects or events.	Define the *target population* of statistical units for which information is sought. The *survey (frame) population* of statistical units (which is the approximation to the target population used in practice) is described in S.18.1. The difference between *target population* and the *survey population* is a coverage issue and is discussed in S13.3

Example S.03.4-6-1 Documentation of statistics for Foreign Owned Enterprises 2016. Statistics Denmark Memo

[In this example the statistical population referenced in Section 3.6 below is the target population.]

2.4 Statistical concepts and definitions

Number of employees: Persons on the payroll in full-time equivalent units.

Enterprise: Usually corresponding to the legal unit, e.g. limited-liability corporations, sole traders, partnerships, etc. In a few cases several legal units which are run as one entity are gathered into one enterprise.

Turnover: Turnover represents the net sales. Included are capitalised work performed by the firm for own purposes and all charges (transport, packaging, etc.) passed on to the customer. Excluded are reduction in prices, rebates, discounts, VAT and excise duties. Income classified as other operating income, financial income and extraordinary income in company accounts is also excluded from turnover.

The ultimate owner: The statistics are defining a company's ownership attached to the ultimate owner who has control over the company, ie, have the ability to determine a company's consult the general policy, if necessary by select a board. As a rule interpreted the controlling unit as the ultimate owner, directly or indirectly, more than 50 per cent. of equity or shareholders' voting rights. The ultimate owner must be understood in relation to the direct owner, since a company can immediately be owned (directly) from a country, even if it ultimately (ultimately) is the owner of another country.

2.5 Statistical unit

The unit in the statistics is enterprise. Usually corresponding to the legal unit, e.g. limited-liability corporations, sole traders, partnerships, etc. In a few cases several legal units which are run as one entity are gathered into one enterprise.

2.6 Statistical population

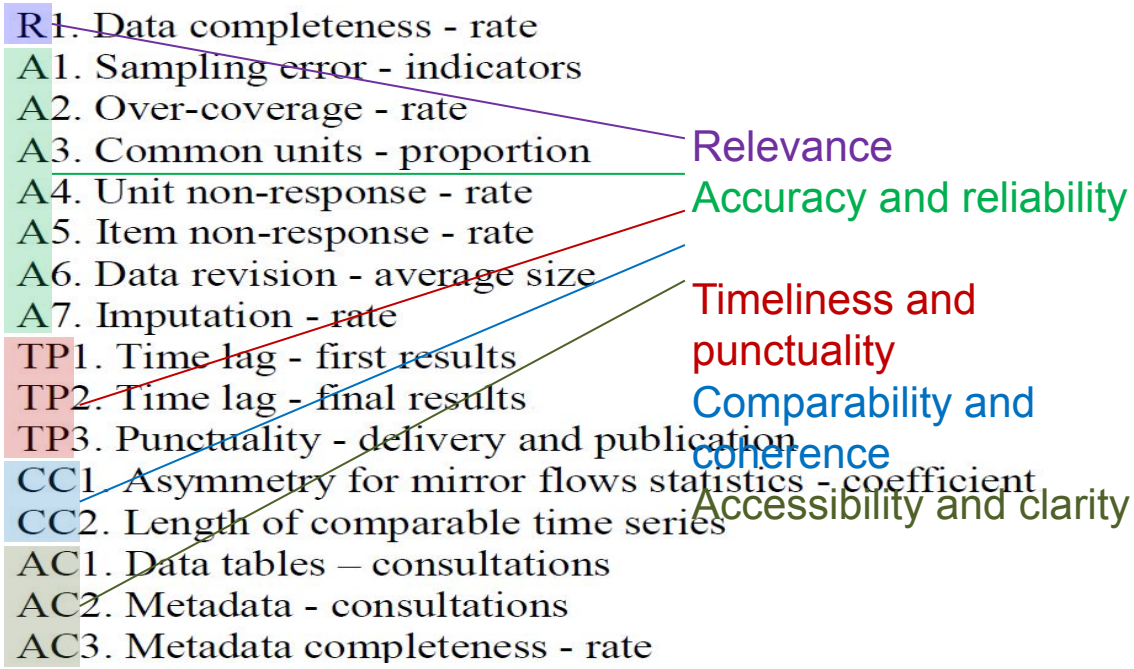
Danish and foreign-owned enterprises in Denmark.

ESS Quality Performance Indicators

EUROPEAN COMMISSION
EUROSTAT
Directorate D: Government finance statistics (GFS) and quality
Unit D-4: Quality management and application to GFS
eurostat
Luxembourg
ESTAT / D4/LA D(2014)

ESS QPIs represent the standard set of indicators shared at European level to measure key aspects of quality and performance in a standard way.

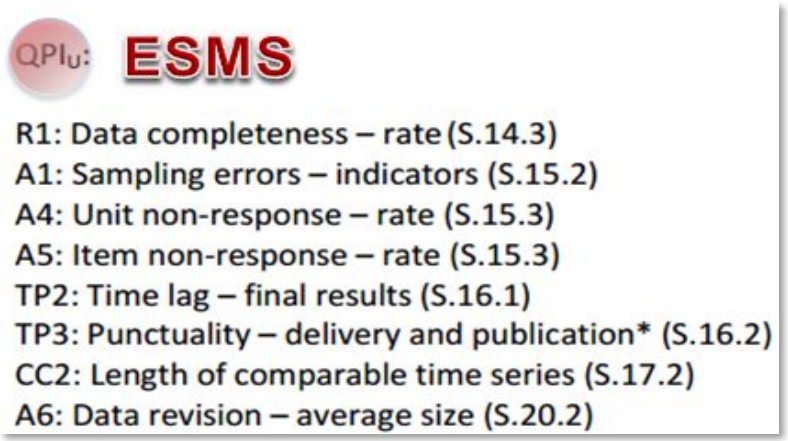
ESS GUIDELINES FOR THE IMPLEMENTATION OF THE ESS QUALITY AND PERFORMANCE INDICATORS (QPI)

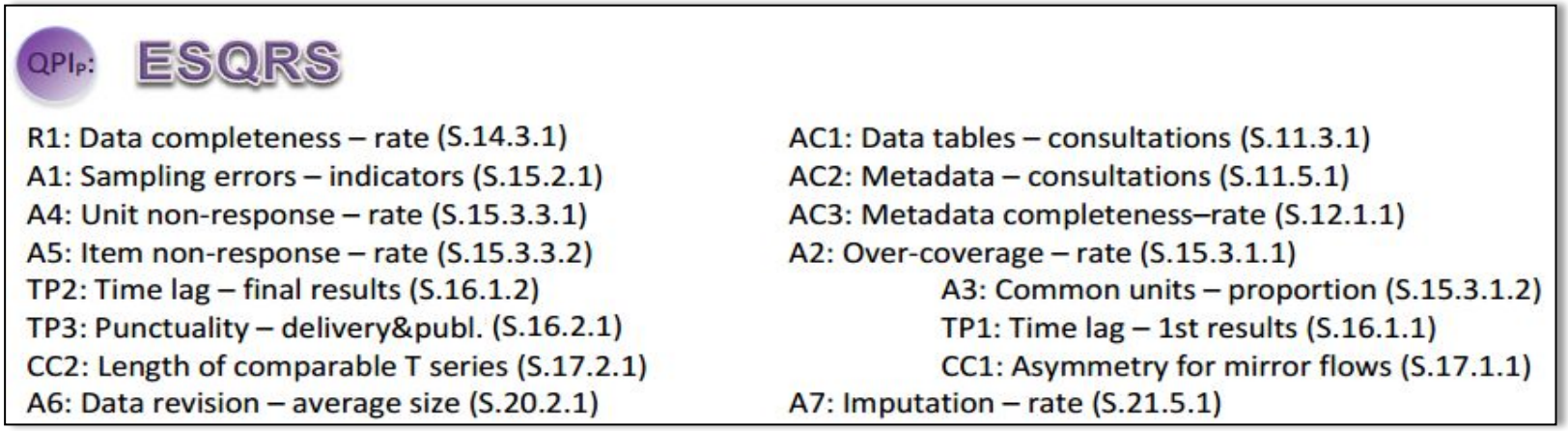


Istat

SIMS incorporates the QPIs

Quality indicators are statistical measures that give an indication of output quality. However, some quality indicators can also give an indication of process quality, like e.g., response rates.





Eurostat perspectives

Improving the coverage rate of SIMS was Eurostat focus in the past few years.

Now, shift from quantity to refinement of contents…

- Harmonization of quality reports
- Advice and support local implementation initiatives
  - automated generation and transmission of metadata and quality reports to be sent to Eurostat
  - better guidelines and better knowledge-sharing for the implementation of SIMS-compliant systems at national level
- Encourage publication of national quality reports by NSIs

Perspectives at NSI level

quality reports coverage: all NSI processes been there?

is it hard to get input for the (bilingual, at least) metadata?

presence of a centralized unit? SIMS based activities must be coordinated

capacity buildings?

Local guidelines (in addition to ESS ones)?

Different local purposes?

NSI reference metadata system: NSI reports vs SIMS?

metadata dissemination?

In the IMF framework (Dissemination Standards Bulletin Board)

IMF Dissemination Standards Bulletin Board

:The Hashemite Kingdom of Jordan

Economic and Financial Data

Date of last update: November 14, 2023

The data shown on this page correspond to the data described in the International Monetary Fund's Dissemination Standards Bulletin Board (DSBB). For a fuller explanation of the DSBB and the statistical standards to which Jordan has committed, please click on DSBB Home Page.

The data shown on this page compiled by the Central Bank of Jordan, the Department of Statistics, and the Ministry of Finance. me of the prescribed breakdowns (underlined items) are shown on additional web pages rather than on the main page. So

Abbreviations used: JD = Jordanian Dinar

[Unless otherwise indicated, data are not seasonally adjusted. Unless otherwise indicated, data are preliminary.]

Population|| External Sector| Financial Sector| Fiscal Sector|[Real Sector

REAL SECTOR						
Data category and component	Unit Description	Observations			% Change from previous period	More information
		Date of latest data	Latest data	Data for previous period		
National accounts						Department of Statistics
*GDP at current market prices, by production approach(2016=100)	JD million	Q2/23	8495.5	8281.4	2.6	
**Agriculture, forestry, and fishing	JD million	Q2/23	175.2	489.4	-64.2	
**Mining and quarrying	JD million	Q2/23	227.3	198.1	14.7	

Istat

5.2.1 Dissemination of documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques

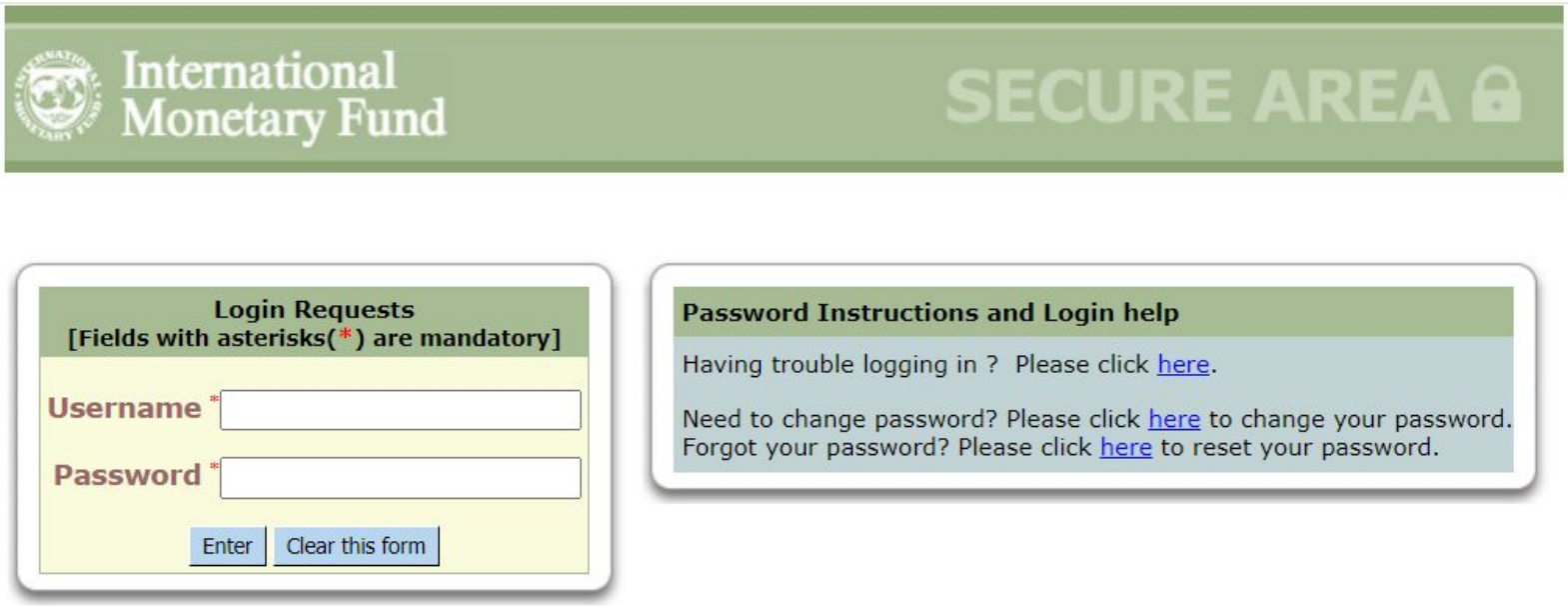
National Accounts	Information on concepts, definitions, data sources and statistical techniques is disseminated to the public. All deviations from internationally accepted standards are documented.
Production Index	Documents in Arabic, containing comprehensive information on PPI sources and methods, are available upon request.
Employment	Detailed documentation on concepts, scope, classifications, data sources and statistical techniques are published in the quarterly bulletin *Labor Force Survey*.
Population	Metadata for the population such as concepts, scope, methodology and accuracy measures in all publications related to population, including the census volumes and other publications related to the household surveys. DOS' website disseminates (in Arabic and English) detailed information on all aspects of the 2004 Census at www.dos.gov.jo/sdb_pop/sdb_pop_e/inde_o.htm

5.2.2 Disseminated level of detail

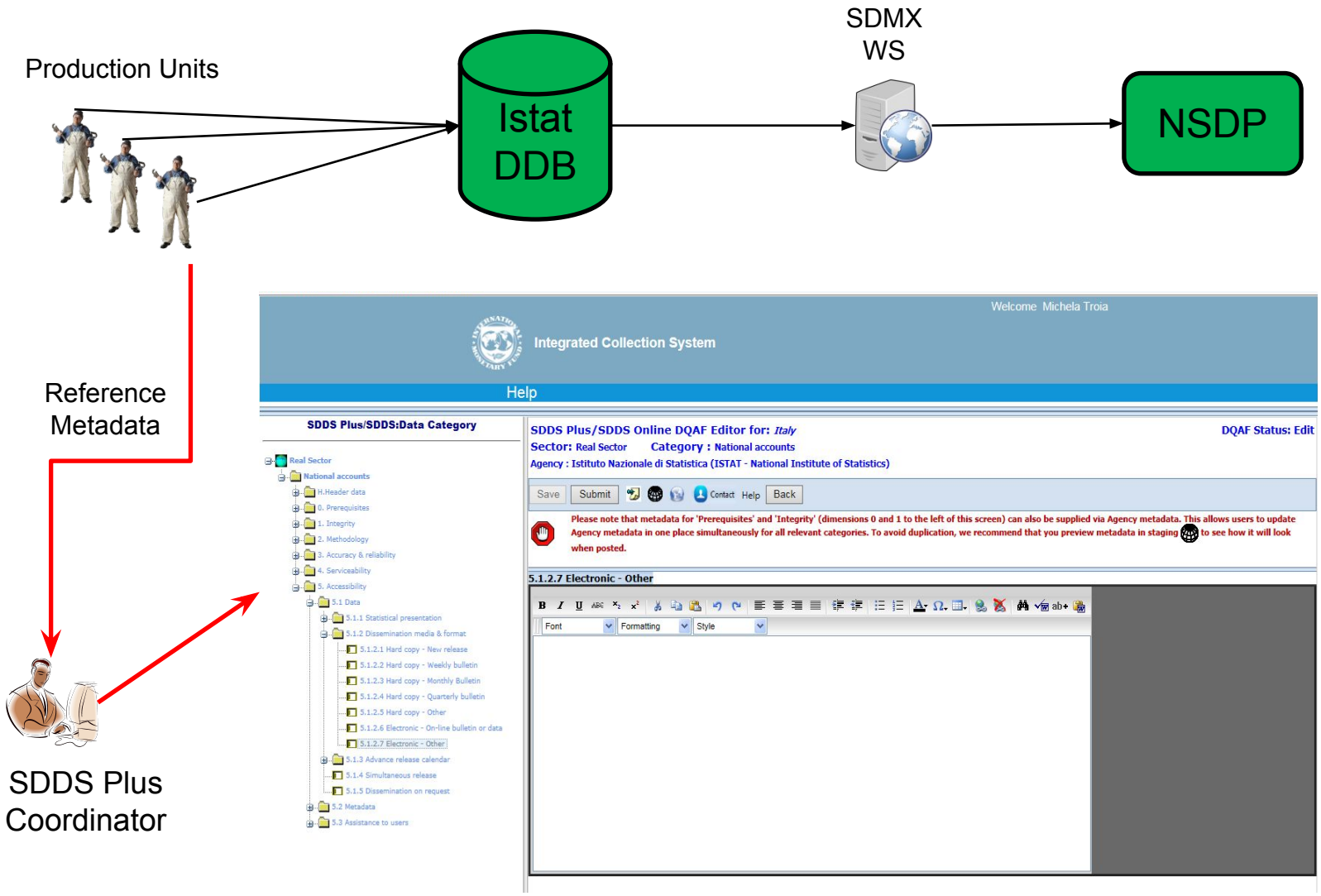
National Accounts	A comprehensive national accounts sources and methods document in Arabic language is available online. Methodological notes are provided in the appendices of dedicated national accounts hard copy publications.
Production Index	Tables are presented in both summarized and detail format through IPI tables disseminated on the DoS website: (www.dos.gov.jo) and in the *statistical year* book and *Jordan in Figures*.
Employment	*Labor Force Survey: Methodology and Detailed Results* provides detailed data tables and information about the survey, including on objectives, survey frame, survey documentation (questionnaire, instructions manual, and coding manual), definitions and classifications, and the work processes. Tables reporting on measures of dispersion and on sampling errors are also published.
Population	The DoS produces special reports for the use of decision makers, researchers and other data users. Decision makers are always provided with reports including summarized tables and certain graphics, while researchers and academics are provided with detailed tables.

IMF

Web application for filling metadata in
ICS: Integrated Collection System



SDDS Plus Istat architecture



IMF contact list

https://dsbb.imf.org/sdds/country/JOR/contacts-list

Category	First Name	Last Name	Agency	E-mail contact
National accounts	Murad	Bani-hamad	DoS	murad@dos.gov.jo
National accounts	Murad	Omari	DoS	murado@dos.gov.jo
National accounts	Walaa	Gharram	DoS	Walaa.Gharram@dos.gov.jo
National accounts	Walid	Battah	DoS	walid.battah@dos.gov.jo
National accounts	Abdellatif	Battah	DoS	w_battah@dos.gov.jo
Production index	Dergham	Obiadat	DoS	Dergham@dos.gov.jo
Labor market: Employment	Jehan	Al Karyouti	DoS	Jehan.Alkaryouti@DOS.GOV.JO
Labor market: Unemployment	Jehan	Al Karyouti	DoS	Jehan.Alkaryouti@DOS.GOV.JO
Labor market: Wages/Earnings	Thamer	Barakat	DoS	thamer@dos.gov.jo
Price index: Consumer prices	Mohammad Ahmad	Abdalrazaq	DoS	MRazaq@dos.gov.jo
Price index: Producer prices	Wasfi	Al-Ali	DoS	Wasfil@dos.gov.jo
General Government Operations	Sahar	Alquran	MOF	sahar.q@mof.gov.jo
Central government operations	Ayman	Abualrish	MOF	ayman.r@mof.gov.jo
Central government debt	Majdaleen	Masandah	MOF	Majdolen.m@mof.gov.jo
Central government debt	Ahmad	Annuz	MOF	ahmad.an@mof.gov.jo
Central government debt	Mohammad	AlQuntar	MOF	mohamad.q@mof.gov.jo
Balance of payments	Ghada	Sharaf	CBJ	ghada.sharaf@cbj.gov.jo
International investment position	Ghada	Sharaf	CBJ	ghada.sharaf@cbj.gov.jo
External debt	Mohammed	ALJaloudi	MOF	mohammed.ja@mof.gov.jo
External debt	Ghada	Sharaf	CBJ	ghada.sharaf@cbj.gov.jo
External debt	Ahmad	Annuz	MOF	ahmad.an@mof.gov.jo
Population	Ahmad	Almomni	DoS	momany@dos.gov.jo

In the UN framework (Sustainable Development Goals)

IAEG-SDG File

Name	Descr	Description
0. Indicator information	en	Description of the Goal, Target, Indicator and data series - if applicable. The date/period when this metadata
0.a. Goal	en	SDG Goal number and name.
0.b. Target	en	SDG Target number and name.
0.c. Indicator	en	SDG Indicator number and name.
0.d. Series	en	Description of SDG data series.
0.e. Metadata update	en	The date when this metadata report is last updated.
0.f. Related indicators	en	Linkages with any other Goals and Targets.
0.g. International organisations(s) responsible for global monitoring	en	Global reporting: International organizations (departments/offices) responsible for monitoring this indicator a
1. Data reporter	en	Information of the contact persons and their organization responsible for the reporting of the indicator or time
1.a. Organisation	en	Agency responsible for reporting of the indicator or time series specified below.
1.b. Contact person(s)	en	Name(s) of the contact points for the data or metadata.
1.c. Contact Organisation Unit	en	Organisation unit information of the contact points for the data or metadata.
1.d. Contact Person Function	en	Functional title(s) of the contact points for the data or metadata.
1.e. Contact Phone	en	Phone number(s) of the contact points for the data or metadata.
1.f. Contact Mail	en	Mailing address(es) of the contact points for the data or metadata.
1.g. Contact emails	en	E-mail address(es) of the contact points for the data or metadata.
2. Definition, concepts and classifications	en	Precise definition of the indicator including references to standards and classifications, preferably relying on i
2.a. Definition and Concepts	en	Precise definition of the indicator preferably relying on internationally agreed definitions. The indicator defini
2.b. Unit of Measure	en	Description of the unit of measurement (proportion, dollars, number of people, etc.)
2.c. Classifications	en	Describe references to both national and international standards and classification being used. [Information t
3. Data source type and data collection method	en	Description of data sources, data collection methods, and related information such as descriptions of all data
3.a. Data sources	en	Description of all actual and recommended sources of data. This description should include, when applicable,
3.b. Data collection method	en	Description of all methods used for data collection. This description should include, when applicable, the sam
3.c. Data collection calendar	en	Dates when source collection is next planned.
3.d. Data release calendar	en	Expected dates of release of new data for this indicator, including the year (or, ideally, the quarter/month whe
3.e. Data providers	en	Identification of national and/or international data provider(s), specifying the organization(s) responsible for
3.f. Data compilers	en	Organization(s) responsible for compilation of on this indicator either at national or global level.
3.g. Institutional Mandate	en	Description of the set of rules or other formal set of instructions assigning responsibility as well as the author
4. Other methodological considerations	en	Other methodological considerations. These include rationale behind the indicator, comments and limitations
4.a. Rationale	en	Description of the purpose and rationale behind the indicator, as well as examples and guidance on its correc
4.b. Comment and limitations	en	Comments on the feasibility, suitability, relevance and limitations of the indicator. Also includes data compar
4.c. Method of computation	en	Explanation of how the indicator is calculated, including mathematical formulas and descriptive information o
4.d. Validation	en	Description of process of monitoring the results of data compilation and ensuring the quality of the statistical
4.e. Adjustments	en	Global reporting: Description of any adjustments with respect to use of standard classifications and harmoniza
4.f. Treatment of missing values (i) at country level and (ii) at regional level.	en	Global reporting: (National level) Description of the methodology employed for producing estimates for the ind
4.g. Regional aggregations	en	Global reporting: Description of the methodology, including any mathematical formulas, used for the calculatio
4.h. Methods and guidance available to countries for the compilation of the data at the	en	Global reporting: Description of methodology used by countries for the compilation of data at national level ar
4.i. Quality management	en	Description of systems and frameworks in place within an organisation to manage the quality of statistical pro
4.j. Quality assurance	en	Description of practices and guidelines focusing on quality in general and dealing with quality of statistical pr
4.k. Quality assessment	en	Description of overall evaluation of fulfilling quality requirements, based on standard quality criteria.
5. Data availability and disaggregation	en	Global reporting: Indicate for how many countries the data for this indicator are already currently available on
6. Comparability / Deviation from international standards	en	Explanation on the differences between country produced and internationally estimated data on this indicator
7. References and Documentation	en	Descriptions and links to all relevant reference materials related to this indicator.
8. Translations	en	Additional information on translation of reference metadata set.

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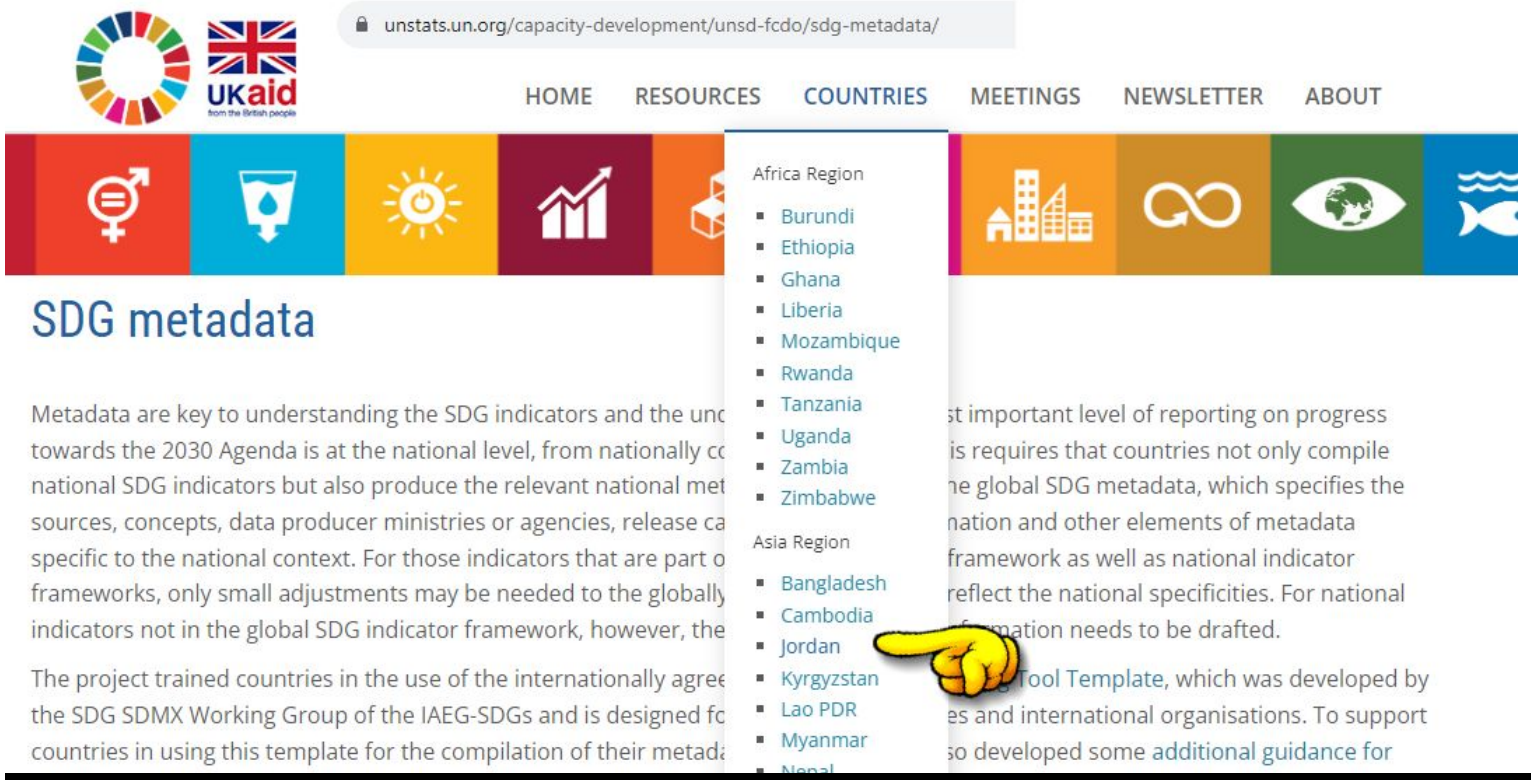
SDGs Metadata



Metadata

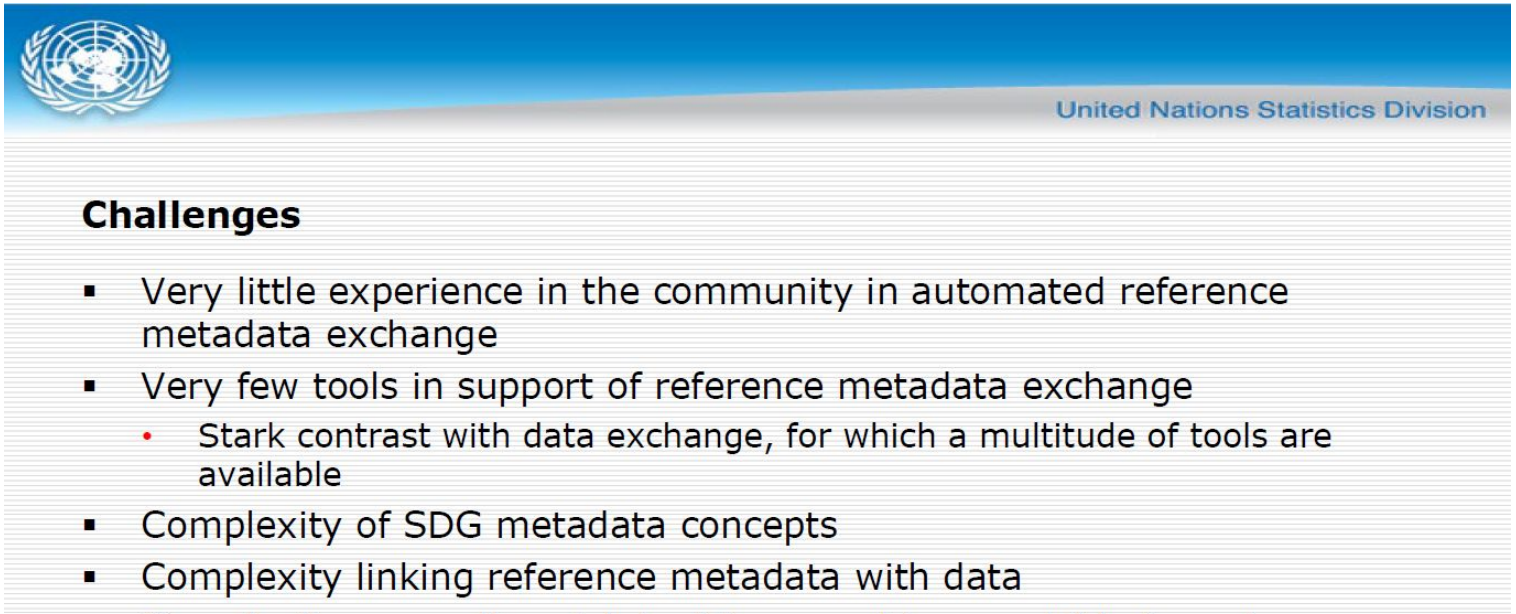
In October 2019, UNSD conducted a metadata workshop in Amman, Jordan, with over 30 participants from DoS, line ministries, specialized agencies and public institutions responsible for SDG indicators. The four-day workshop focused on hands-on, practical sessions on compiling national metadata with inputs from all relevant ministries and agencies. Unfortunately, the Covid-19 Pandemic has stalled some activities, including metadata compilation and dissemination.

SDG

Metadata is attached based on the following three parameters:

- Reporting type (Global, Regional or National)
- SDG Series
- Reference Area (Countries and regions)

In addition, Language is also specified (SDMX metadata is multilingual)



SDG Reference Metadata Exchange pilot

United Nations Statistics Division

Solution

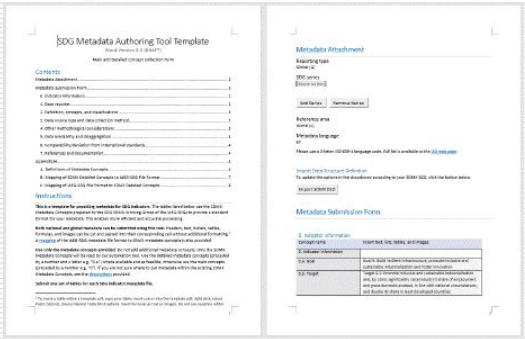
- Use SDMX to structure SDG reference metadata and link to data
- Use a structured MS Word-based template to provide reference metadata
- Use a web-based reference metadata authoring tool to extract metadata from the template and convert to SDMX
  - The template can be skipped if the reporter is able to provide metadata directly in SDMX
- Develop an API to disseminate metadata in a machine-readable format

- UNSD and WB joined forces to exploit synergies between the two projects

Pilot project flow

United Nations Statistics Division

Complete MS Word-based SDG Metadata Exchange Template



Submit to SDMX Metadata Authoring Tool and get xml file or comparison report

Submit to SDGs Data Lab

Istat

Pilot project takeaways

- Use SDMX to structure SDG reference metadata and link to data
- Use a structured MS Word-based template to provide reference metadata
- Use a web-based reference metadata authoring tool to extract reference metadata from the template and convert to SDMX

  The template can be skipped if the reporter is able to provide metadata directly in SDMX
- Develop an API to disseminate metadata in a machine-readable format

Implementation (SDMX)

As of today

There is very little exchange of reference metadata and lack of tools.
Manual processes involved are labor-intensive and error-prone.

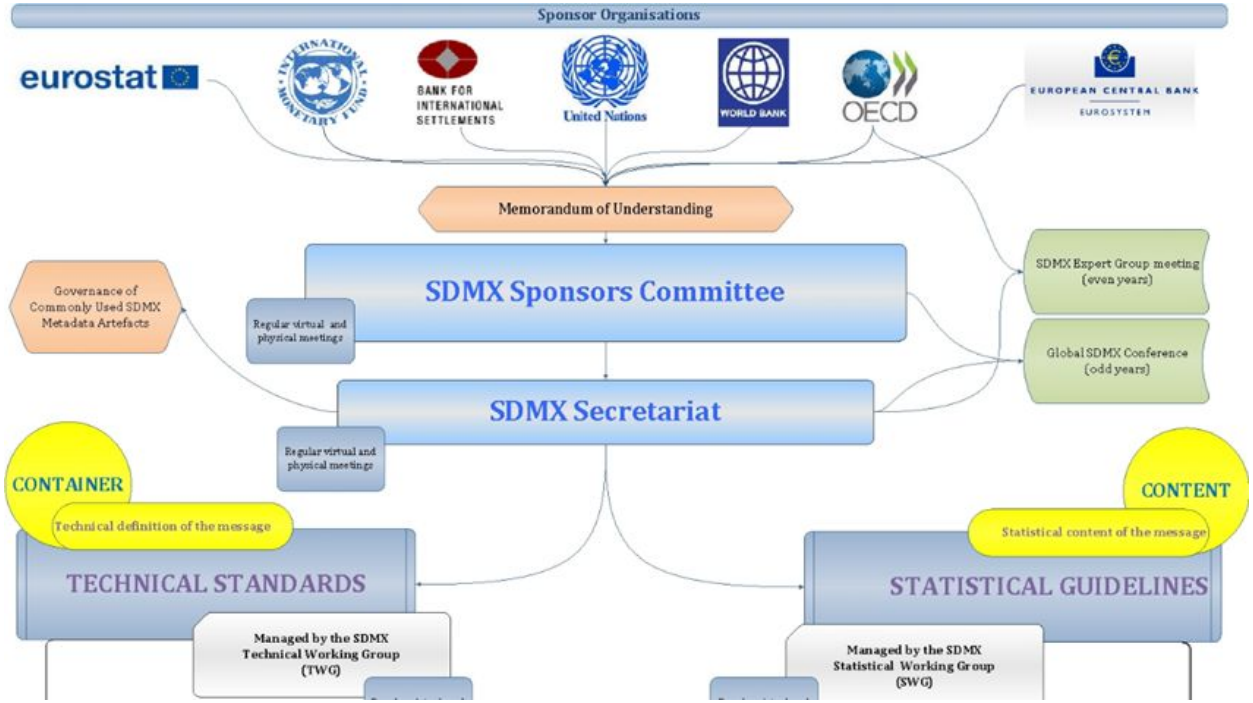
Organisations have very different reference metadata frameworks.
This makes it difficult for reporters to supply reference metadata.
Therefore, it doesn't happen.

Implementation User Story

The Agency wishes to manage its reference metadata using a framework that can be reused across domains while avoiding manual processing.

Achieving these goals with a unified standard and automated system will save the Agency time and money.

Statistical Data and Metadata eXchange



SDMX is "*THE PREFERRED STANDARD FOR EXCHANGE AND SHARING OF DATA AND METADATA IN THE GLOBAL STATISTICAL COMMUNITY*" (UN Statistical Commission endorsement); ESS standard; has ISO status (17369). It is widely used by international organizations, NSIs, and other data producing agencies.

Contents

The SDMX metamodel allows metadata to be:

► **exchanged** without the need to embed it within the object described.

► **stored separately** from the object that it describes, yet be linked to it (for example, an organisation has a metadata repository which supports the dissemination of metadata resulting from metadata requests generated by systems or services that have access to the object for which the metadata pertains. This is common in web dissemination where additional metadata is available for viewing (and eventually downloading) by clicking on an "information" icon next to the object to which the metadata is attached).

► **indexed** to aid searching (example: a registry service can process a metadata report and extract structural information that allows it to catalogue the metadata in a way that will enable users to query for it).

► **reported according to a defined structure**.

SDMX and metadata exchange

The introduction of SDMX was important in the harmonization of metadata (and data) exchange; it means standards and guidelines that allow organizations to gain efficiencies and avoid duplication of work.

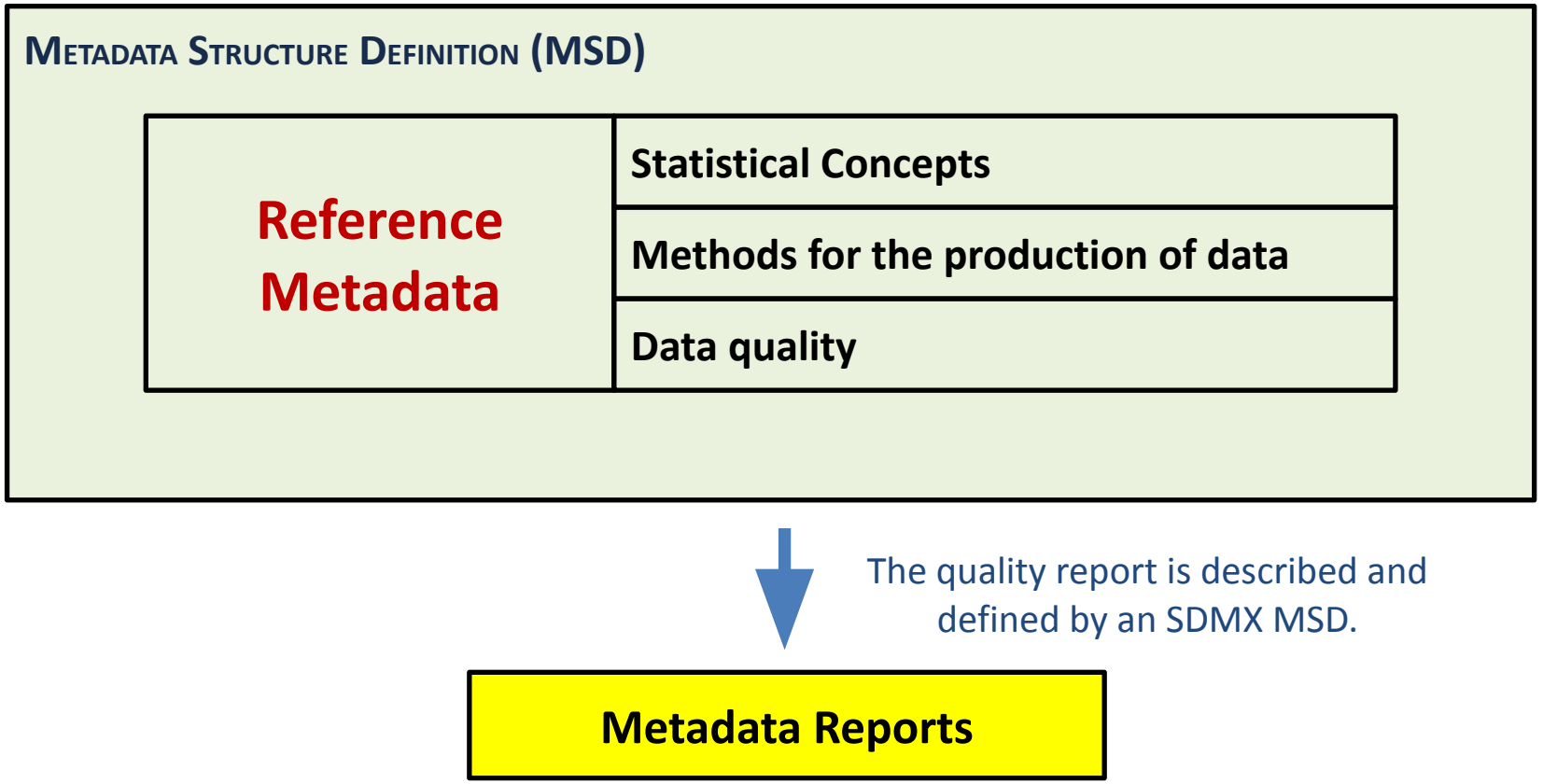
Before SDMX, metadata were sent in excel, in word, by e-mail.

SDMX normalises metadata exchanges and enables them to be shared more efficiently among organisations.

The use of a standard format for metadata exchanges also led to the definition of a standard structure: in this sense it had an impact on contents too.

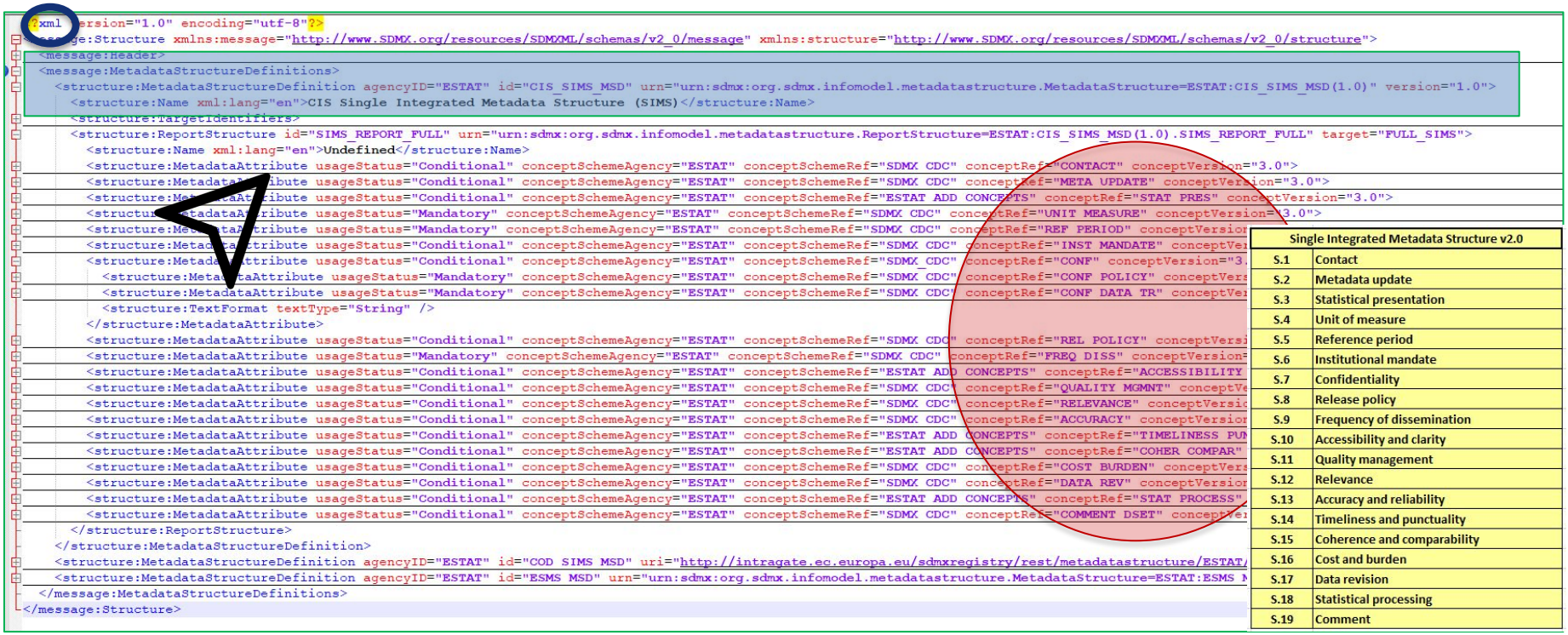
Metadata Structure Definition

The MSD is the main SDMX object for quality reporting



Metadata Structure Definition

Nothing but an XML message



Single Integrated Metadata Structure v2.0	
S.1	Contact
S.2	Metadata update
S.3	Statistical presentation
S.4	Unit of measure
S.5	Reference period
S.6	Institutional mandate
S.7	Confidentiality
S.8	Release policy
S.9	Frequency of dissemination
S.10	Accessibility and clarity
S.11	Quality management
S.12	Relevance
S.13	Accuracy and reliability
S.14	Timeliness and punctuality
S.15	Coherence and comparability
S.16	Cost and burden
S.17	Data revision
S.18	Statistical processing
S.19	Comment

The ESS framework

The quality report is described and defined by an SDMX **Metadata Structure Definition (MSD)**, and all MSDs are available in the **Euro-SDMX Registry**.

- The MSD defines the Report Structure comprising a set of **Metadata Attributes** that can be defined as a hierarchy, where each Metadata Attribute identifies a **Concept**.

- The Metadata Attribute can be specified as having multiple occurrences and/or specified as being **mandatory** or **conditional**.

- Each Metadata Attribute can have a **Representation** specified, e.g. **String**; **Date**; reference to a **Code List**, which is also stored in the Euro-SDMX Registry; **Boolean**.

The “new” MSD

Other than the standard properties of Agency, Id, Version, Name, Description – the MSD will have one or more Metadata Attributes.
This means the only job of the MSD is to define the structure of a report.

```
<str:MetadataStructure agencyID="WB" id="FOOTNOTES" version="1.0">
    <com:Name xml:lang="en">Footnotes</com:Name>

    <str:MetadataAttribute minOccurs="1" maxOccurs="unbounded" id="CONTACT" isPresentational="true">
        <str:ConceptIdentity>
            <Ref agencyID="SDMX" id="CONTACT"/>
        </str:ConceptIdentity>

        <str:MetadataAttribute minOccurs="1" maxOccurs="1" id="CONTACT_NAME">
            <str:ConceptIdentity>
                <Ref agencyID="SDMX" id="CONTACT_NAME"/>
            </str:ConceptIdentity>
            <str:LocalRepresentation>
                <str:TextFormat textType="string"/>
            </str:LocalRepresentation>
        </str:MetadataAttribute>

        <str:MetadataAttribute minOccurs="1" maxOccurs="3" id="ADDRESS" isPresentational="true">>
            <str:ConceptIdentity>
                <Ref agencyID="SDMX" id="ADDRESS"/>
            </str:ConceptIdentity>

            <str:MetadataAttribute minOccurs="1" maxOccurs="1" id="HOUSE_NUMBER">
                <str:ConceptIdentity>
                    <Ref agencyID="SDMX" id="HOUSE_NUMBER"/>
                </str:ConceptIdentity>
                <str:LocalRepresentation>
                    <str:TextFormat textType="Integer"/>
                </str:LocalRepresentation>
            </str:MetadataAttribute>

        </str:MetadataAttribute>

    </str:MetadataAttribute>
```

CONTACT - presenational only to group contract related metadata

Contact Name and other related attributes (department, phone, etc) under the CONTACT attribute

Address - presentational only with up to 3 addresses allowed

House Number, and other address related attributes as a child of the ADDRESS attribute

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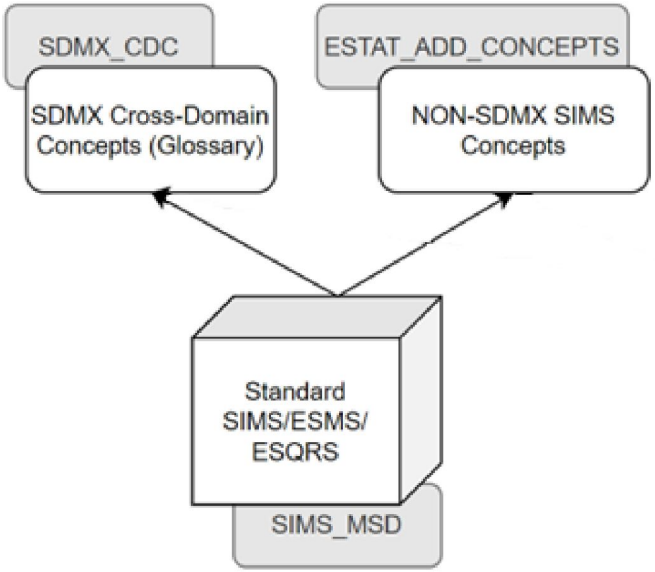
Building the MSD



Single Integrated Metadata Structure v2.0	
S.1	Contact
S.2	Metadata update
S.3	Statistical presentation
S.4	Unit of measure
S.5	Reference period
S.6	Institutional mandate
S.7	Confidentiality
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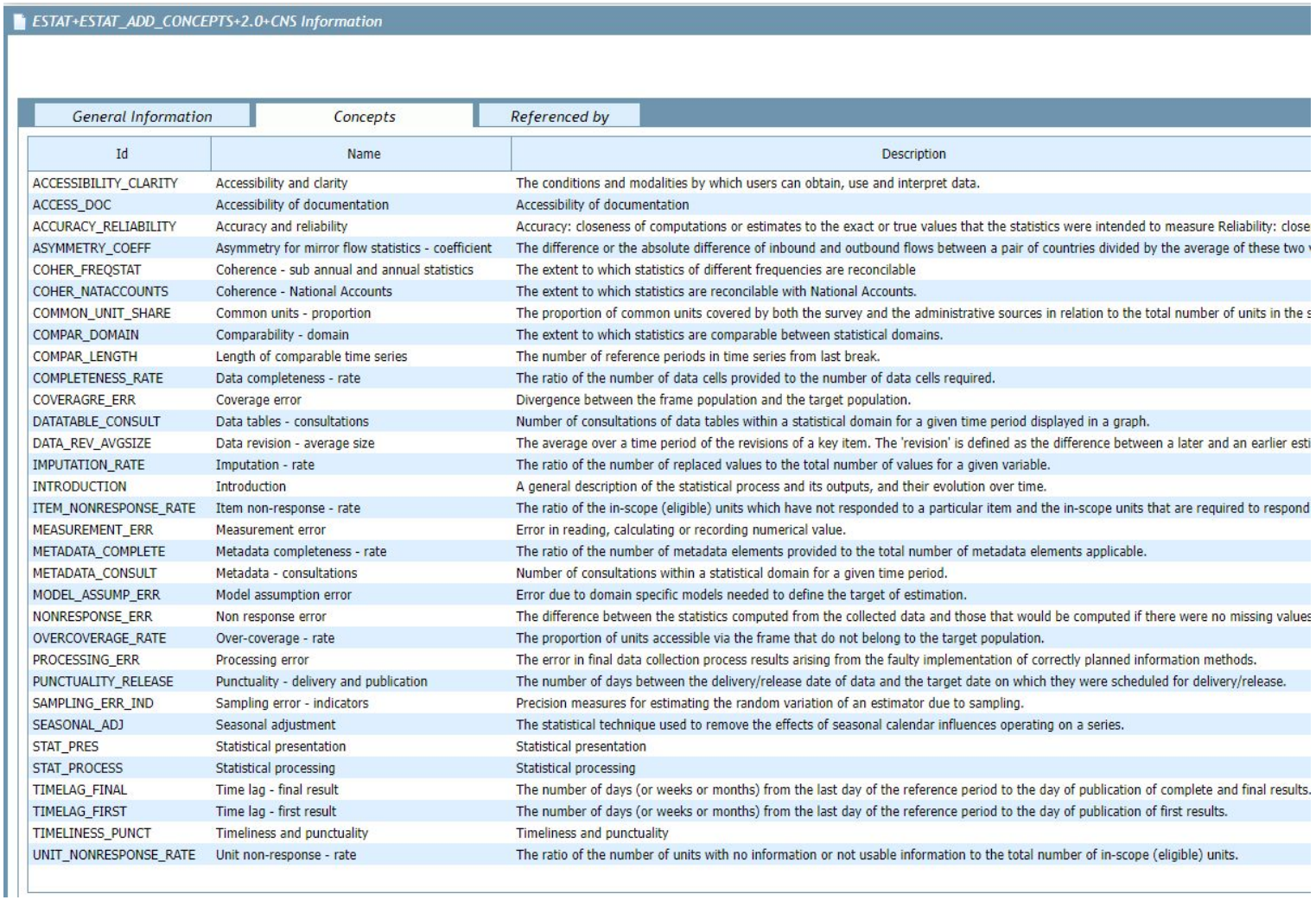
S.9	Frequency of dissemination
S.10	Accessibility and clarity
S.11	Quality management
S.12	Relevance
S.13	Accuracy and reliability
S.14	Timeliness and punctuality
S.15	Coherence and comparability
S.16	Cost and burden
S.17	Data revision
S.18	Statistical processing
S.19	Comment

- Different Metadata Attributes in the same Report Structure can use Concepts from different Concept Schemes.
- The Metadata Attribute can be specified as having multiple occurrences and/or specified as being mandatory or conditional.
- Each Metadata Attribute can have a Representation specified (using the localRepresentation association) e.g., String; Date; Boolean.

Specific EU Concepts for Reference Metadata



ESTAT+ESTAT_ADD_CONCEPTS+2.0+CNS Information

General Information | Concepts | Referenced by

Id	Name	Description
ACCESSIBILITY_CLARITY	Accessibility and clarity	The conditions and modalities by which users can obtain, use and interpret data.
ACCESS_DOC	Accessibility of documentation	Accessibility of documentation
ACCURACY_RELIABILITY	Accuracy and reliability	Accuracy: closeness of computations or estimates to the exact or true values that the statistics were intended to measure Reliability: close
ASYMMETRY_COEFF	Asymmetry for mirror flow statistics - coefficient	The difference or the absolute difference of inbound and outbound flows between a pair of countries divided by the average of these two
COHER_FREQSTAT	Coherence - sub annual and annual statistics	The extent to which statistics of different frequencies are reconcilable
COHER_NATACCOUNTS	Coherence - National Accounts	The extent to which statistics are reconcilable with National Accounts.
COMMON_UNIT_SHARE	Common units - proportion	The proportion of common units covered by both the survey and the administrative sources in relation to the total number of units in the s
COMPAR_DOMAIN	Comparability - domain	The extent to which statistics are comparable between statistical domains.
COMPAR_LENGTH	Length of comparable time series	The number of reference periods in time series from last break.
COMPLETENESS_RATE	Data completeness - rate	The ratio of the number of data cells provided to the number of data cells required.
COVERAGRE_ERR	Coverage error	Divergence between the frame population and the target population.
DATATABLE_CONSULT	Data tables - consultations	Number of consultations of data tables within a statistical domain for a given time period displayed in a graph.
DATA_REV_AVGSIZE	Data revision - average size	The average over a time period of the revisions of a key item. The 'revision' is defined as the difference between a later and an earlier esti
IMPUTATION_RATE	Imputation - rate	The ratio of the number of replaced values to the total number of values for a given variable.
INTRODUCTION	Introduction	A general description of the statistical process and its outputs, and their evolution over time.
ITEM_NONRESPONSE_RATE	Item non-response - rate	The ratio of the in-scope (eligible) units which have not responded to a particular item and the in-scope units that are required to respond
MEASUREMENT_ERR	Measurement error	Error in reading, calculating or recording numerical value.
METADATA_COMPLETE	Metadata completeness - rate	The ratio of the number of metadata elements provided to the total number of metadata elements applicable.
METADATA_CONSULT	Metadata - consultations	Number of consultations within a statistical domain for a given time period.
MODEL_ASSUMP_ERR	Model assumption error	Error due to domain specific models needed to define the target of estimation.
NONRESPONSE_ERR	Non response error	The difference between the statistics computed from the collected data and those that would be computed if there were no missing values
OVERCOVERAGE_RATE	Over-coverage - rate	The proportion of units accessible via the frame that do not belong to the target population.
PROCESSING_ERR	Processing error	The error in final data collection process results arising from the faulty implementation of correctly planned information methods.
PUNCTUALITY_RELEASE	Punctuality - delivery and publication	The number of days between the delivery/release date of data and the target date on which they were scheduled for delivery/release.
SAMPLING_ERR_IND	Sampling error - indicators	Precision measures for estimating the random variation of an estimator due to sampling.
SEASONAL_ADJ	Seasonal adjustment	The statistical technique used to remove the effects of seasonal calendar influences operating on a series.
STAT_PRES	Statistical presentation	Statistical presentation
STAT_PROCESS	Statistical processing	Statistical processing
TIMELAG_FINAL	Time lag - final result	The number of days (or weeks or months) from the last day of the reference period to the day of publication of complete and final results.
TIMELAG_FIRST	Time lag - first result	The number of days (or weeks or months) from the last day of the reference period to the day of publication of first results.
TIMELINESS_PUNCT	Timeliness and punctuality	Timeliness and punctuality
UNIT_NONRESPONSE_RATE	Unit non-response - rate	The ratio of the number of units with no information or not usable information to the total number of in-scope (eligible) units.

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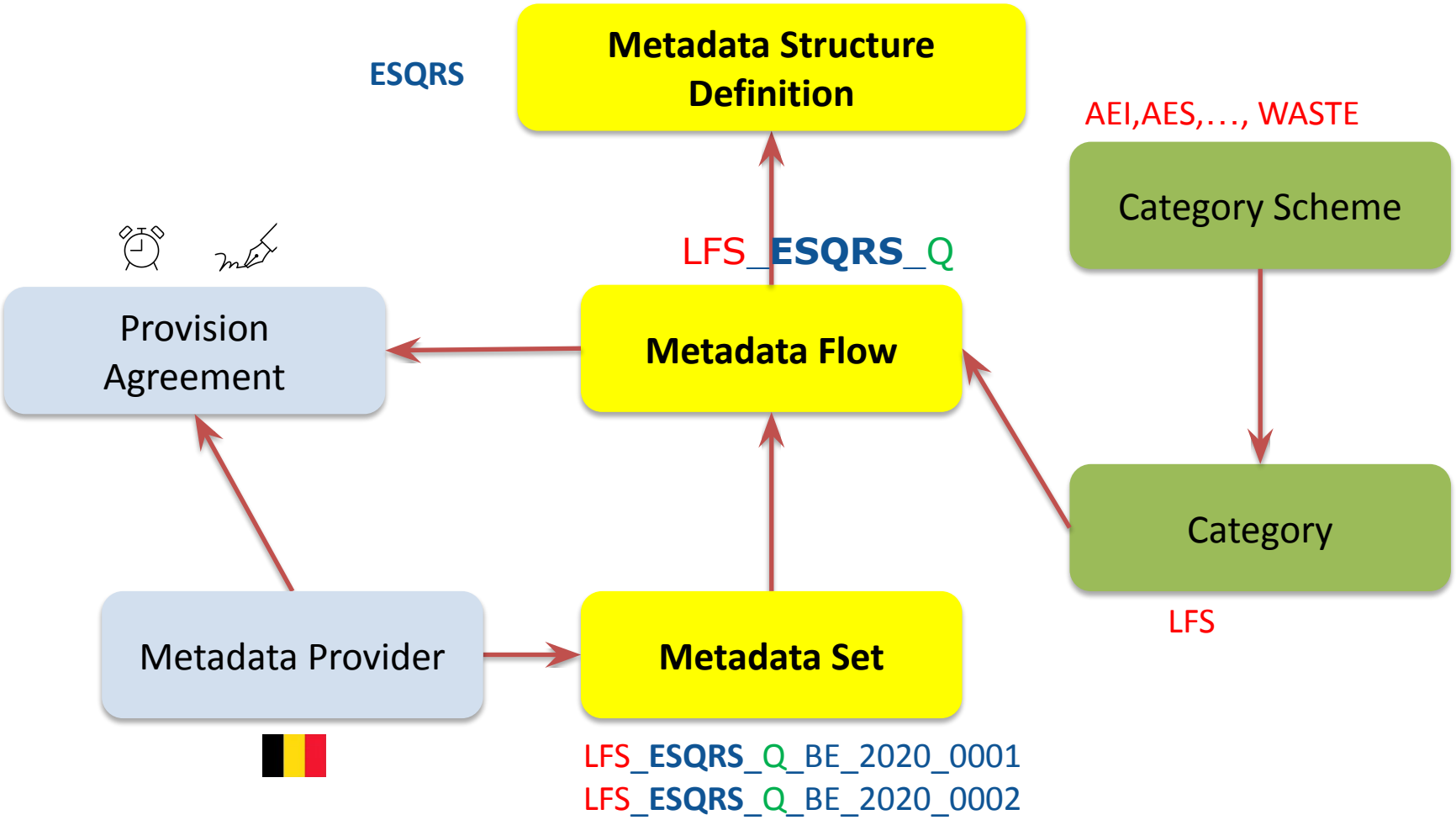
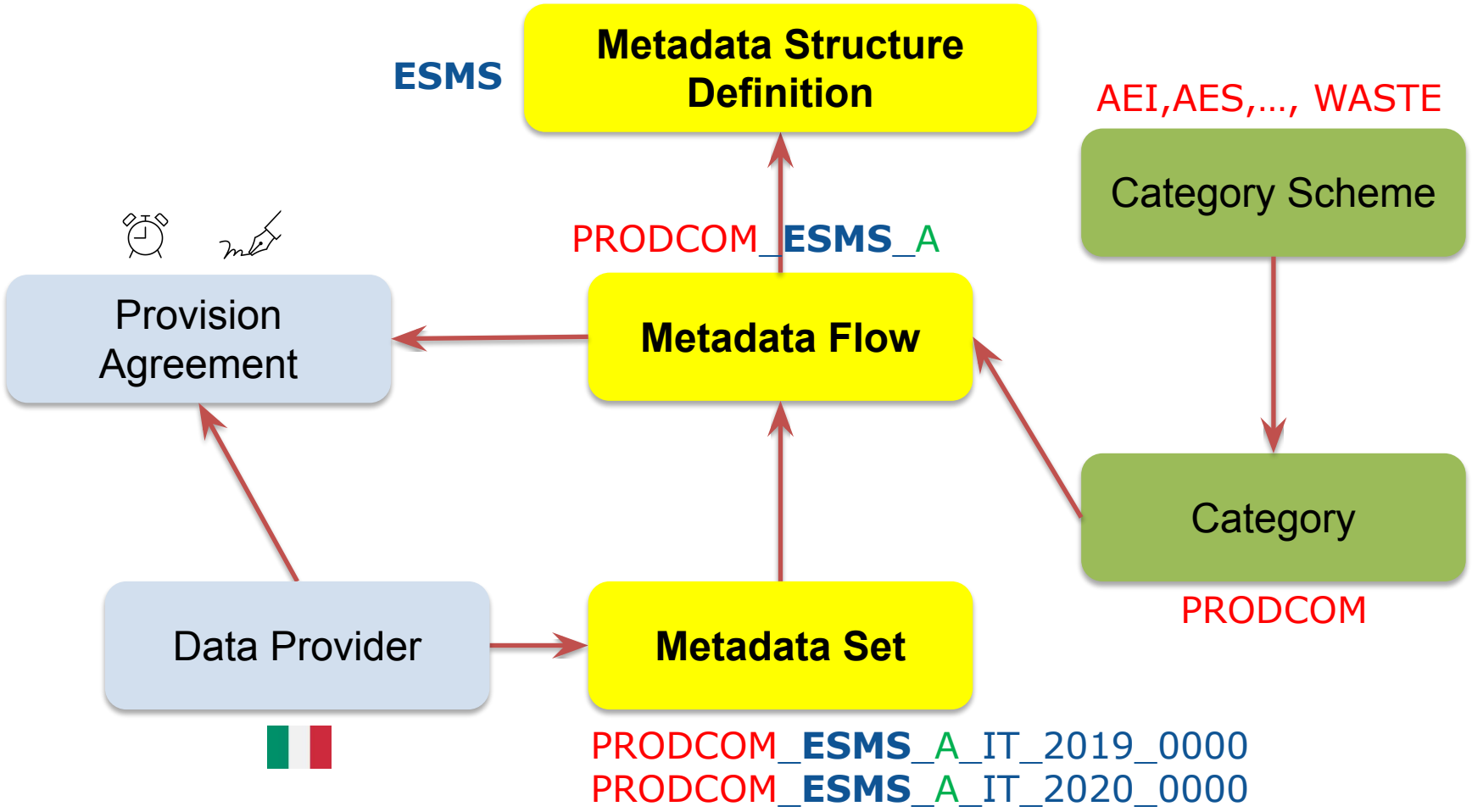
Metadata artifacts



Metadata artifacts



Hierarchy of SDMX artefacts

MSD

- list of metadata concepts, it corresponds to the template that the quality report should follow. ESMS and ESQRS are implemented through MSDs.

MDF

- abstract concept of a flow of metadata: adds information about what the metadata can be reported against i.e., statistical **domain**, reporting **frequency** (**AEI**_ESQRS_**A**)

MDS

- contains the filled in quality report, referring to a MDF. It reports the identifiers of the MSD, reports the values of the metadata attributes of the MSD

SDMX Glossary and SDMX Registry

https://sdmx.org/wp-content/uploads/SDMX_Glossary_Version_2_1_December_2020.htm

Statistical concepts and definitions

Definition Definitions and descriptions of the main variables provided.

Context This metadata element is used to define and describe the types of variables provided (raw figures, annual growth rates, index, flow or stock data, etc.) referring to internationally accepted statistical standards, guidelines, or good practices on which the concepts and definitions that are used for compiling the statistics are based. Discrepancies should be documented.

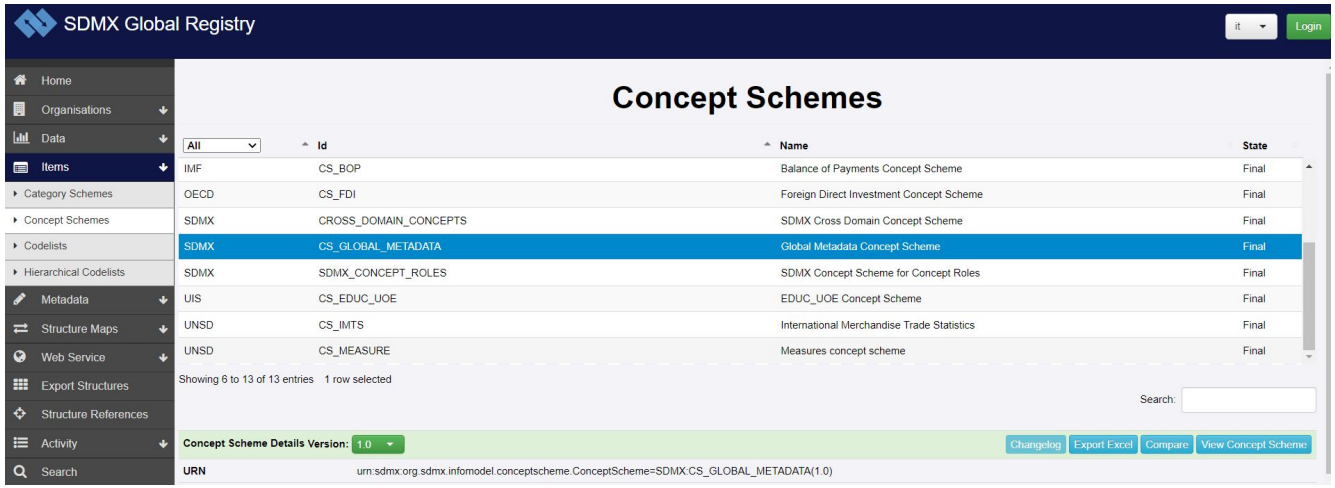
Type Cross-domain concept

Concept ID STAT_CONC_DEF

Recommended representation String

Source SDMX, "SDMX Glossary Version 1.0", February 2016 (https://sdmx.org/wp-content/uploads/SDMX_Glossary_Version_1_0_February_2016.docx)

https://registry.sdmx.org/items/conceptscheme.html



Objective

Define a “once for all purposes” Concept Scheme
for handling all **exchange**/**dissemination** channels.

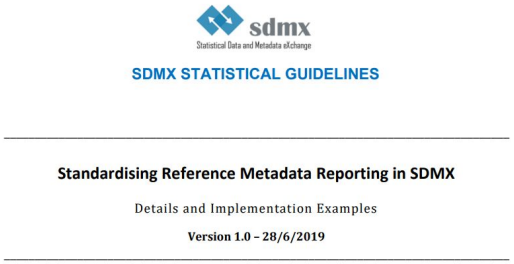
This agreement on a common set of metadata items would strongly foster the improvement and the harmonization of the reference metadata at DoS (e.g., NO duplicate storage on different databases).

From such superset, it would be possible to derive the:

- **subsets needed by the international organizations acting as metadata collectors**,
- **customized user-oriented quality reports used to increase the clarity of the statistics disseminated on the DoS website**

Standardising Reference Metadata Reporting in SDMX

Guideline available here.



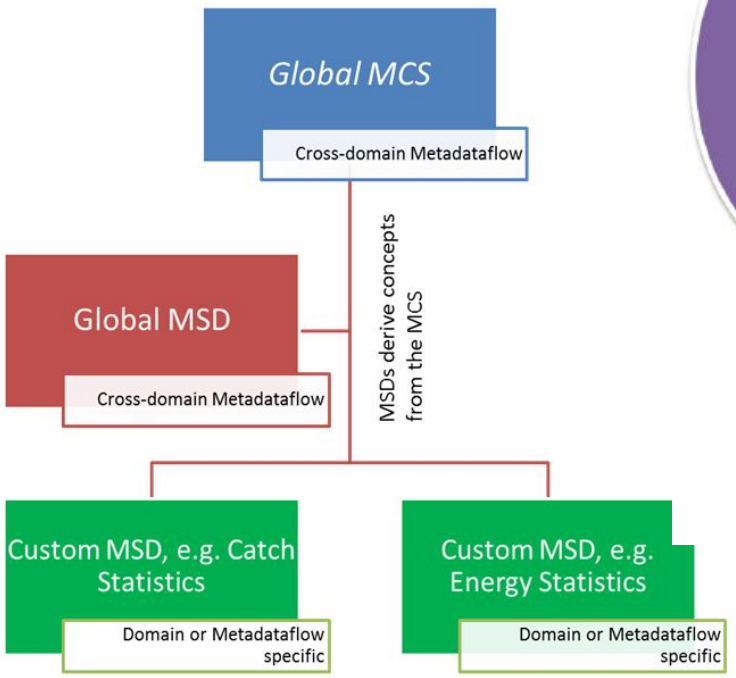
Defined a Global Reference Metadata Concept Scheme (“Global MCS”) that enumerates a standard list of reference metadata concepts.

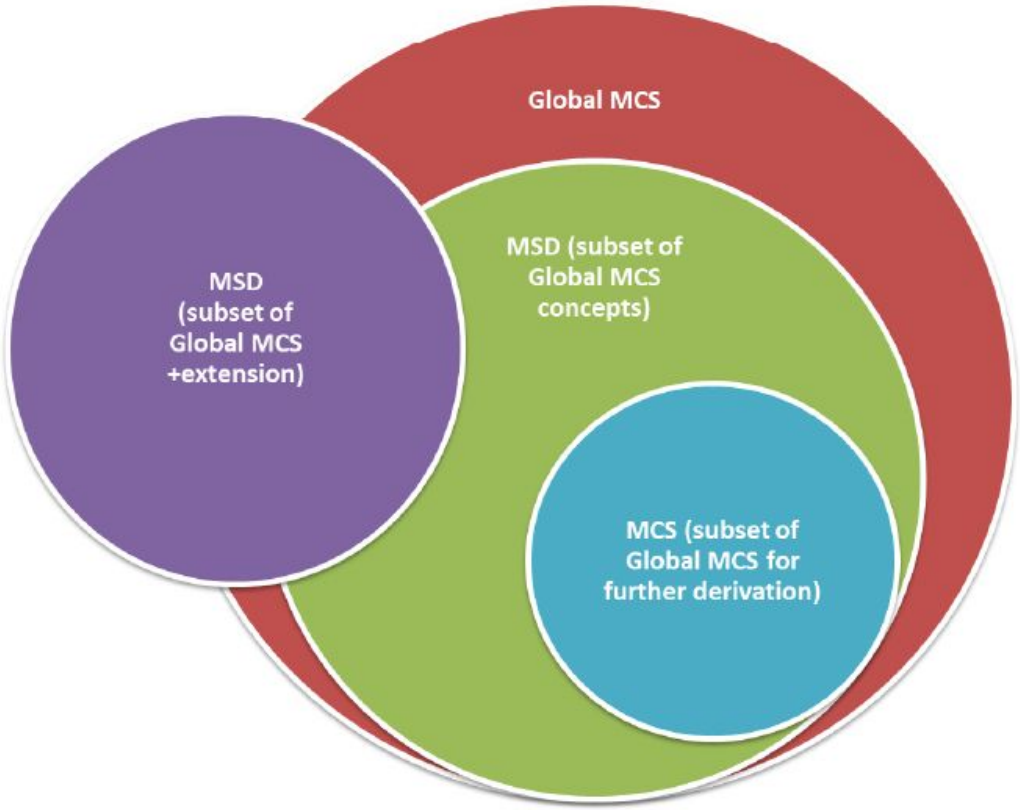
The procedure of building the Global MCS was to group the concepts relating to reference metadata into homogeneous categories, for example: Administrative Information; Scope; Statistical Processing. The categories are simply guides and are not functional categories.

The Global MCS encompasses all SDMX reference metadata concepts; however, some of them may not be relevant for a metadata exchange program; therefore, implementation structures will likely be created that use a subset of the MCS concepts.

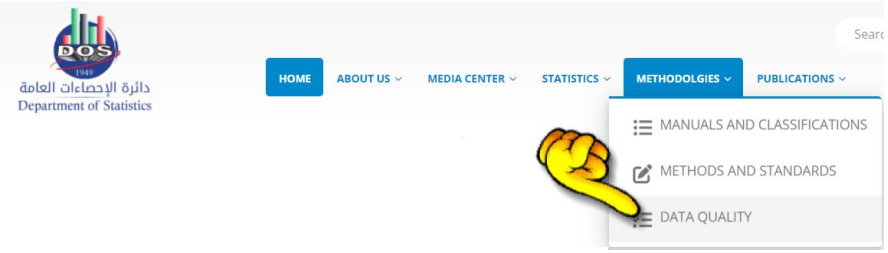
SDMX proposal

The Global MCS is an “abstract” artefact: it cannot be used directly. Instead, “implementation artefacts” must be created that derive from the Global MCS.





DoS quality report



Quality of Declaration

Name (please insert survey name)
Consumer Price Index

Sector (survey sector: social, economic, agricultural, etc.)
Economic (collecting retail prices of numerous goods and services to calculate the CPI)

Directorate and contact person (the directorate conducting the survey and the responsible person, and contact details)
Directorate of National Accounts – dergham faiz obeidat – Tel. 5300700, ext. 1421- dergam@dos.gov.jo

Purpose and historical reference

Purpose (please write down the survey purposes)
The survey aims to achieve the following:

1. Indices are used as a tool to estimate GDP at fixed prices.
2. CPI is a factor linked to wages and salaries in some organizations.
3. Indices are considered as an indicator to measure the impact of economic and political decisions on the economic situation.
4. CPI is used to measure inflation in the cost of living.

Historical reference (please indicate the year the survey started)
CPI is calculated using 2018 as a base year

Users and Applications:
Users: economic experts and researchers, the Central Bank, Ministry of Finance, private sector
Applications: the figures are used to calculate GDP in fixed prices, setting and implementing the governments' financial policies and as a basis for economic decisions.

Source (please write all data resources) Data is collected by means of a monthly survey

Authorized organization to collect and publish data Department of Statistics, as per law no. 12/2012.

1. Contents

1-1 Content description
This survey provides a monthly and accumulative consumer price index, as well as the monthly and accumulative variance percentages in CPI

Content
Time
Accuracy
Comparability
Data Accessibility

1-2 statistical definitions The Consumer price index is an abstract figure that measures the variance in consumer prices over a time period (comparison period), relative to another period (base period).
1-3 variables Good prices
1-4 Classifications (basis of details in the tables) Tables are based upon 2018

2- Time

2-1 reference period (during which the data is collected) Data is collected monthly.
2-2 date of dissemination Data is disseminated 8-14 days after the end of the reference month
2-3 commitment to date of dissemination Available
2-4 periodicity Monthly
2-5 availability of time series (mention available time series of this survey)
There is a time series of monthly surveys starting 2006 until now.
There is a time series of annual surveys from 1967 – 2021.

3- Accuracy

3-1 overall accuracy (very high if all items in checklist are implemented, high if two thirds are implemented, medium if less than half the items are implemented) Very high
3-2 sources of inaccuracy Sample
3-3 available accuracy measures Descriptive accuracy measures

4- Comparability

4-1 comparability over time (ability to compare data with previously published data) The data is comparable with previously published data, due to using the same methodology in accordance with international standards.
4-2comparability with other statistics (ability to compare data with figures in other surveys, and with other countries) The data is comparable with other statistics, which use the same international standards for defining and classifying indices.

5- data accessibility

5-1 publication formats (how can the user access the data, e.g. DOS website, paper copies, etc..)
The data is published in printed and electronic format on DOS website:
http://www.dos.gov.jo/dos_home_a/main/economic/price_num

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