7. Detail: Main SDMX objects for metadata exchange (What is SDMX? Part iii)

Bogdan ZDRENTU
Eurostat
Unit B5: "Data and metadata services and standards"

Types of metadata

Structural metadata

- acting as identifiers and descriptors of the data, such as:
  - **dimensions of statistical cubes**
  - **variables**
  - **titles of tables**
  - **Nomenclatures (code lists)**
- always be associated with the data to allow their identification, retrieval and browsing.

Example for structural metadata

DIMENSIONS

Table name	Year	Country	Nace code	SBS indcator	Value
3P	2008	BE	G	12110	1310003927
3P	2008	BE	G45	12110	70115216
3P	2008	BE	G451	12110	23972264
3P	2008	BE	G4511	12110	10096872
3P	2008	BE	G4519	12110	12073876
3P	2008	BE	G452	12110	18460065
3P	2008	BE	G4520	12110	16345242
3P	2008	BE	G453	12110	17433177
3P	2008	BE	G4531	12110	13348313
3P	2008	BE	G4532	12110	11870718
3P	2008	BE	G454	12110	3613667
3P	2008	BE	G4540	12110	807793
3P	2008	BE	G46	12110	523765890
3P	2008	BE	G461	12110	128812274
3P	2008	BE	G4611	12110	7812082
3P	2008	BE	G4612	12110	41087798

CODES

Types of metadata

Reference metadata

- acting only as descriptors of the data, they don’t help to actually identify the data.
- They can be of different kinds:
  - **conceptual metadata**
  - **methodological metadata**
  - **quality metadata (process and output)**
- can be exchanged independently from the data they are related to, but are however often linked to them.

Example for reference metadata

eurostat EUROPEAN COMMISSION

Health variables of EU-SILC

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. Dissemination format
11. Accessibility of documentation
12. Quality management
13. Relevance
14. Accuracy
15. Timeliness and punctuality
16. Comparability
17. Coherence
18. Cost and Burden
19. Data revision
20. Statistical processing
21. Comment
Related Metadata
Annexes (including footnotes)

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	F5: Education, health and social protection
1.5. Contact mail address	2920 Luxembourg LUXEMBOURG

2. Metadata update

Top

2.1. Metadata last certified	19/11/2013
2.2. Metadata last posted	19/11/2013
2.3. Metadata last update	23/10/2013

3. Statistical presentation

Top

3.1. Data description

The European Statistics of Income and Living Condition (EU-SILC) survey contains a small module on health, composed of 3 variables on health status and 4 variables on unmet needs for health care.
The variables on **health status** represent the so called Minimum European Health Module (MEHM), and measures 3 different concepts of health:

- Self-perceived health
- Chronic morbidity (people having a long-standing illness or health problem)
- Activity limitation – disability (self-perceived long-standing limitations in usual activities due to health problems)

The variables on unmet needs for health care targets two broad types of services: medical care and dental care. The variables refer to the respondent's own assessment of whether he or she needed the respective type of examination or treatment, but did not have it and if so what was the main reason of not having it, Eurostat currently disseminates the following indicators for unmet needs:

ESS standardisation of reference metadata based on SDMX

- The SDMX Glossary (2016)
- The SDMX Technical Standards:
  - The information model for creation of the Metadata Structure Definitions (MSDs);
  - The SDMX-ML for documenting the XML format;
  - The Euro SDMX Registry for storing the MSDs etc.

Standardisation of structural metadata

- Code lists describe dimensions in data tables, giving a meaning to the data.
- Code lists are based on:
  - official statistical classifications such as NACE, NUTS, ISCO…
  - the SDMX Glossary
  - Domain specific codifications
- A standard code list is a code list already harmonised
- Standard code lists should be used all along the statistical business process: data design, collection, aggregation, dissemination, archiving…

Example of a harmonised code list (NACE Rev. 1.1)

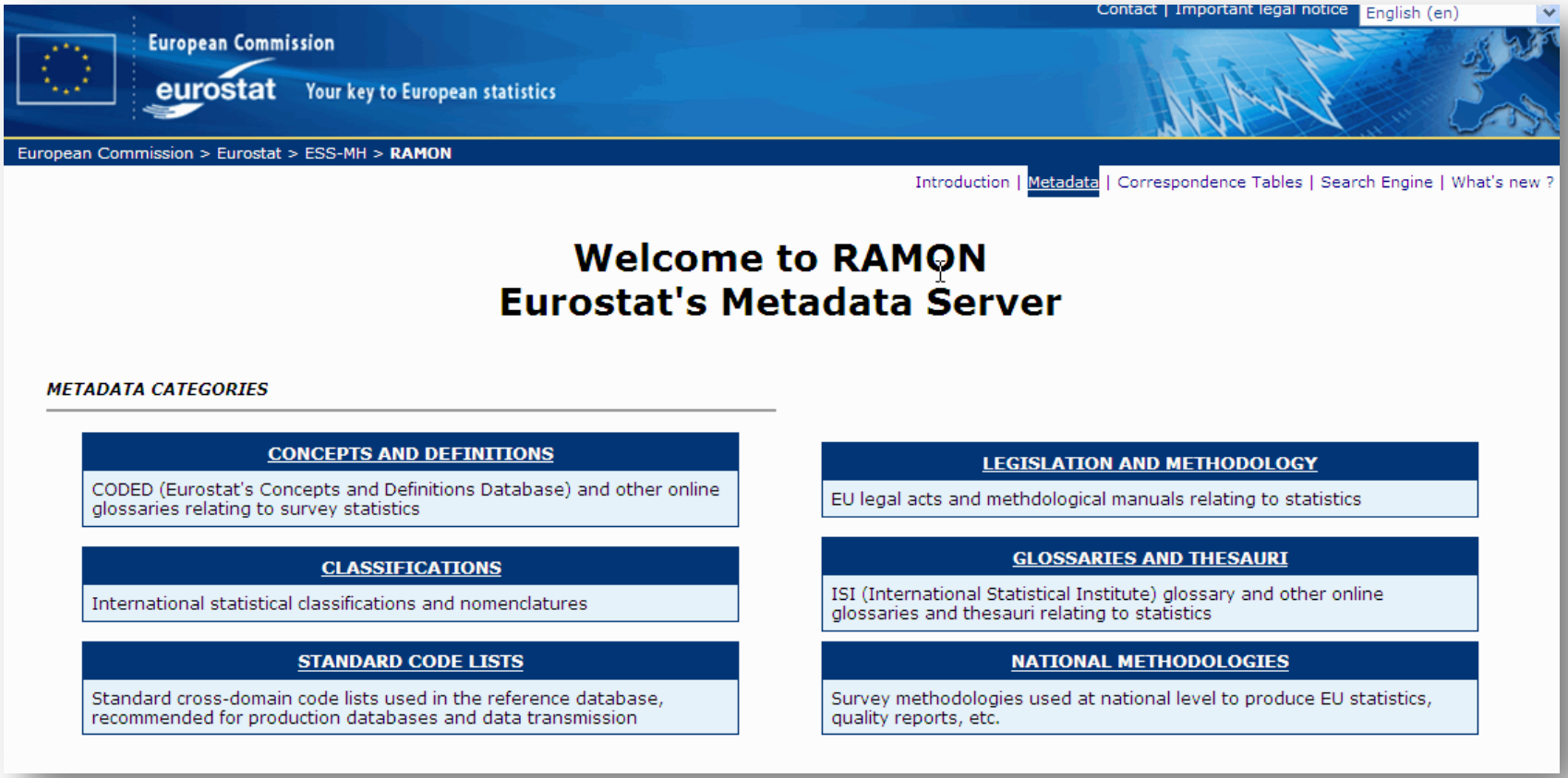
	Old version (before harmonisation)		New version (after harmonisation)	
Domains	**Old codes**	**Old label_en**	**New codes**	**New label_en**
hrst, htec	MA_TOTAL	Manufacturing sector	**D**	Manufacturing
fats	MAN	Manufacturing industries		
theme3	RD	Manufacturing industry		
theme4	B0200	Manufacturing industry		
theme8	SE0_4	Manufacturing industry		
theme9	TOT_MANUF	Manufacturing industry		
ds, hrst, htec	MA_LOW_TEC	Low technology manufacturing sector	**D_LTC**	Low-technology manufacturing
fats / inn	LOT	Low Technology (incl. following NACE codes: 15-22; 36, 37)		
inn	I_LOW_TEC	Low tech industries: NACE Rev.1 codes 15 to 22, 36 and 37		
hrst, htec	SE_TOTAL	Services: NACE Rev. 1.1 sections G to Q = 50 to 99	**G-Q**	Services
fats	SER	Services sector		

Impact on the statistical business processes

- Better comparability: same codes for the same concepts
- Increase efficiency: less transcoding; less code lists; clean lists
- Improve accuracy: facilitate data management and exchange and reduce the number of errors
- Re-usability and integration of the data: data warehouse are only possible if codes corresponding to the same concept are the same
- The ESS standard code lists will also be made available in the Euro SDMX Registry (currently RAMON).

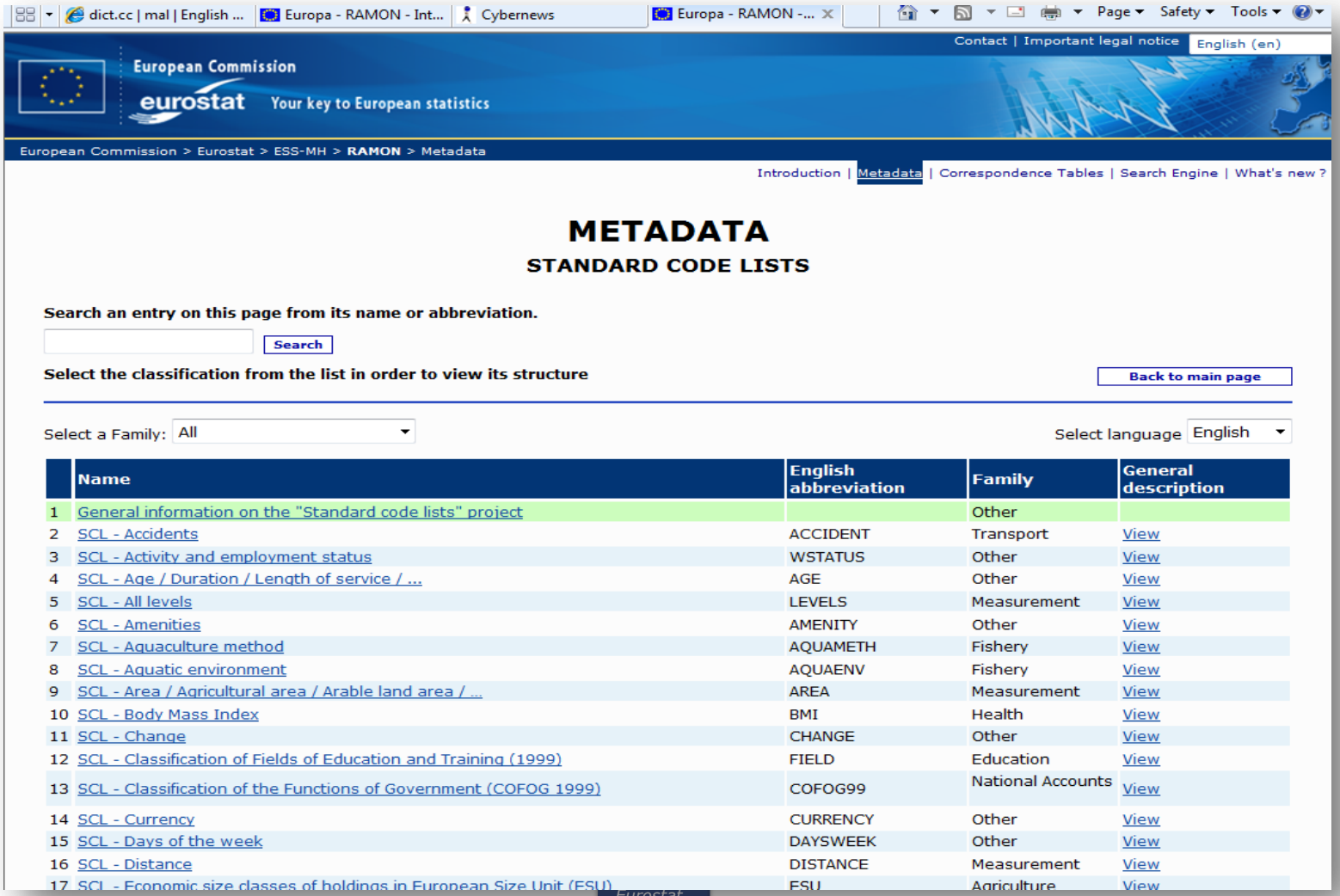
European Commission

RAMON



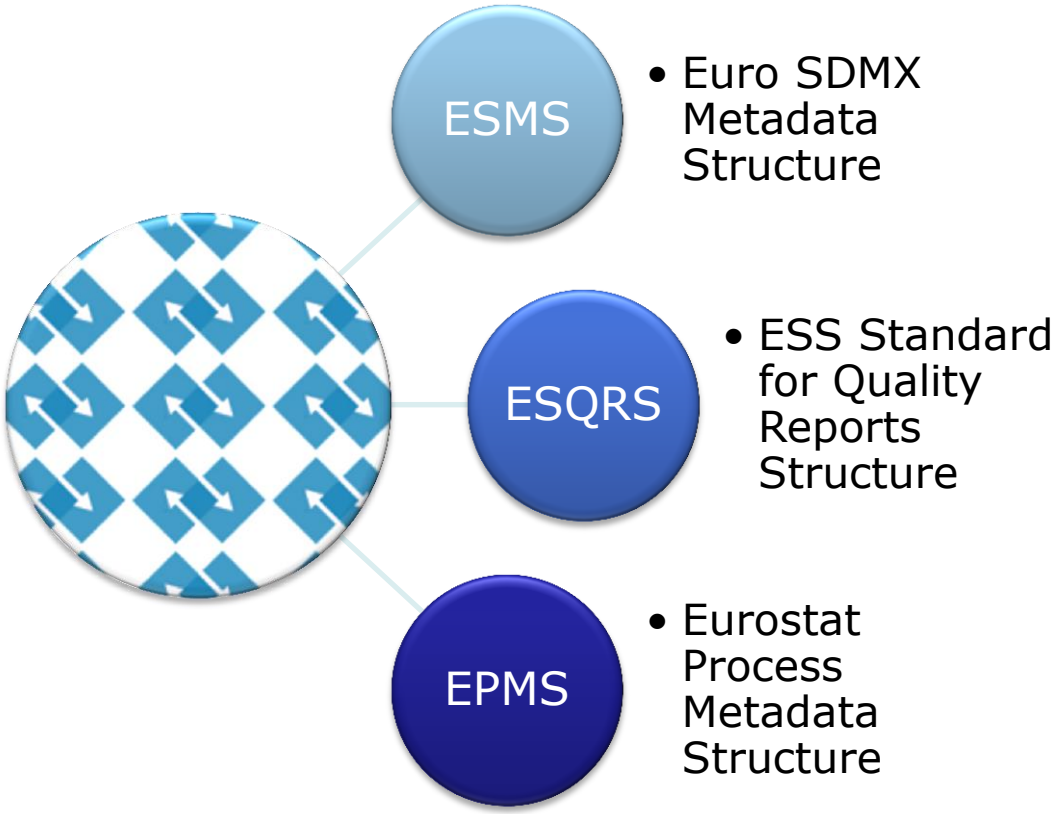
http://ec.europa.eu/eurostat/ramon

Standard Code Lists in RAMON



	Name	English abbreviation	Family	General description
1	General information on the "Standard code lists" project		Other	
2	SCL - Accidents	ACCIDENT	Transport	View
3	SCL - Activity and employment status	WSTATUS	Other	View
4	SCL - Age / Duration / Length of service / ...	AGE	Other	View
5	SCL - All levels	LEVELS	Measurement	View
6	SCL - Amenities	AMENITY	Other	View
7	SCL - Aquaculture method	AQUAMETH	Fishery	View
8	SCL - Aquatic environment	AQUAENV	Fishery	View
9	SCL - Area / Agricultural area / Arable land area / ...	AREA	Measurement	View
10	SCL - Body Mass Index	BMI	Health	View
11	SCL - Change	CHANGE	Other	View
12	SCL - Classification of Fields of Education and Training (1999)	FIELD	Education	View
13	SCL - Classification of the Functions of Government (COFOG 1999)	COFOG99	National Accounts	View
14	SCL - Currency	CURRENCY	Other	View
15	SCL - Days of the week	DAYSWEEK	Other	View
16	SCL - Distance	DISTANCE	Measurement	View
17	SCL - Economic size classes of holdings in European Size Unit (ESU)	ESU	Agriculture	View

The ESS Reference Metadata Standards



The Euro SDMX Metadata Structure (ESMS)

	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

	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

	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**

The ESS Standard for Quality Reports Structure (ESQRS)

	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

	Concept Name
5	**Relevance**
5.1	User Needs
5.2	User Satisfaction
5.3	Completeness
5.3.1	Data completeness - rate
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

	Concept Name
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
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**

Integration of ESMS and ESQRS under SIMS

	SIMS	
	ESMS	ESQRS
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	

	SIMS	
	ESMS	ESQRS
S.9	**Frequency of dissemination**	
S.10	**Accessibility and clarity**	
S.10.1	News release	
S.10.2	Publications	
S.10.3	On-line database	
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	

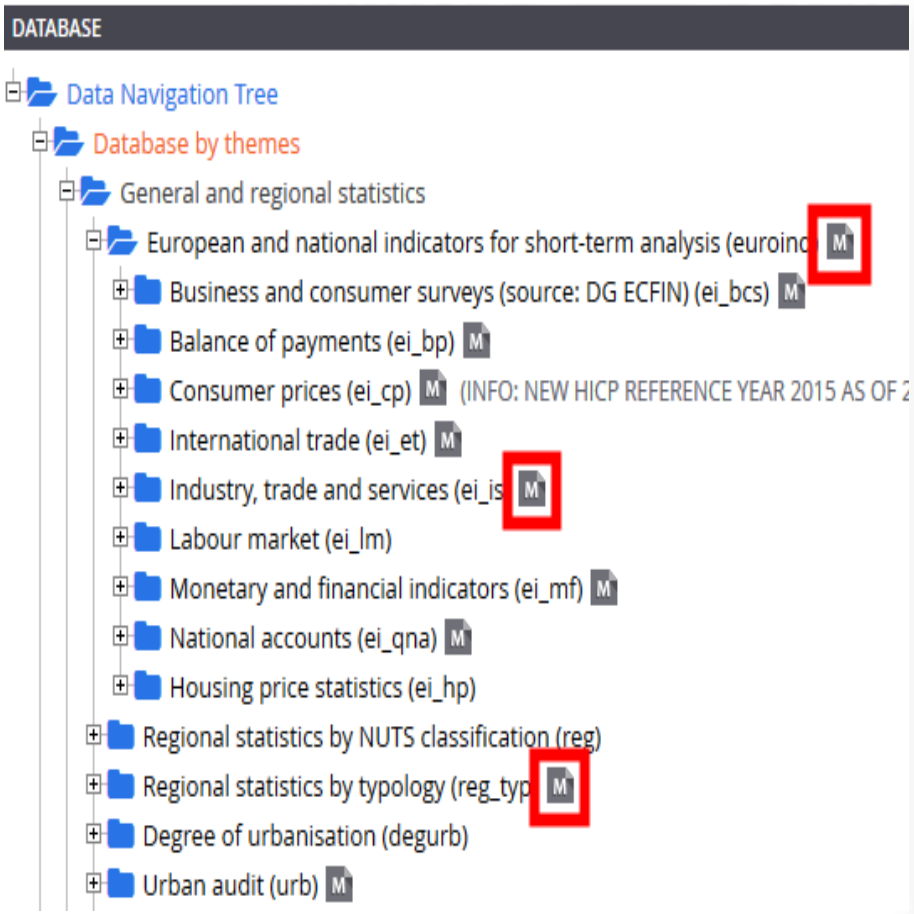
	SIMS	
	ESMS	ESQRS
S.14	**Timeliness and punctuality**	
S.14.1	Timeliness and *TP2. Time lag - final results for U*	
S.14.1.1	TP1. Time lag - first results for P	
S.14.1.2	TP2. Time lag - final results for P	
S.14.2	Punctuality and *TP3. Punctuality - delivery and publication for U*	
S.14.2.1	TP3. Punctuality - 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*	
S.15.2.1	CC2. Length of comparable time series for P	
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**	

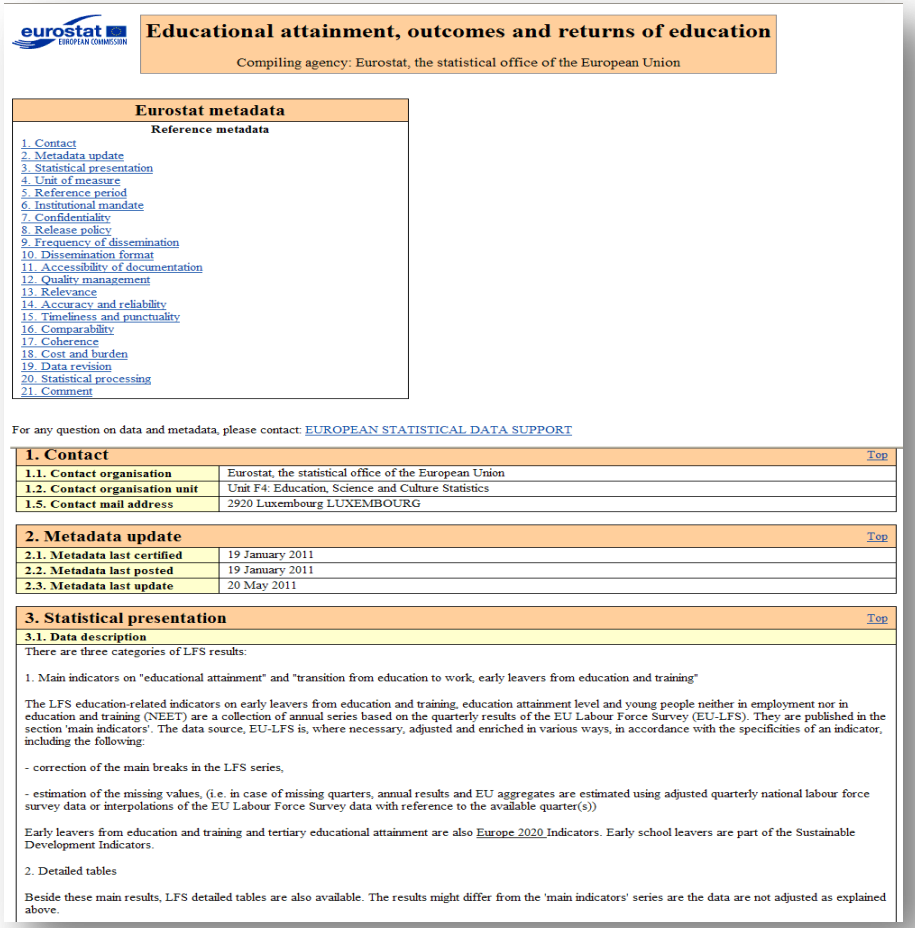
The Euro Process Metadata Structure (EPMS)

	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	**Summary process description**
3	**Workflow**
4	**Statistical processing**
4.1	Data collection
4.2	Source data
4.2.1	Source data - integration
4.2.2	Source data - coding
4.3	Data validation
4.3.1	Data validation in Member States
4.3.2	Validation rules agreed with Member States
4.3.3	Data validation - detection (Eurostat)
4.3.4	Data validation - correction (Eurostat)

	Concept name
4.4	Data compilation
4.4.1	Data compilation - variables
4.4.2	Data compilation - weights
4.4.3	Data compilation - aggregates
4.4.4	Data compilation - finalisation
4.4.5	Data compilation - draftoutput
4.5	Data validation - final
4.5.1	Data validation final - output
4.5.2	Data validation final - explanation
5	**Confidentiality**
5.1	Confidentiality - data treatment
6	**Release policy**
6.1	User access
7	**Dissemination format**
7.1	Publications
7.2	On-line database
7.3	Micro-data access
7.4	Other
8	**IT applications**
8.1	IT applications for data reception/collection
8.2	IT applications for data processing
8.3	IT applications for data validation
8.4	IT applications for data confidentiality
8.5	IT applications for metadata
8.6	Other IT applications

Dissemination of reference metadata





Educational attainment, outcomes and returns of education

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. Dissemination format
11. Accessibility of documentation
12. Quality management
13. Relevance
14. Accuracy and reliability
15. Timeliness and punctuality
16. Comparability
17. Coherence
18. Cost and burden
19. Data revision
20. Statistical processing
21. Comment

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

1. Contact Top

1.1. Contact organisation	Eurostat, the statistical office of the European Union
1.2. Contact organisation unit	Unit F4: Education, Science and Culture Statistics
1.5. Contact mail address	2920 Luxembourg LUXEMBOURG

2. Metadata update Top

2.1. Metadata last certified	19 January 2011
2.2. Metadata last posted	19 January 2011
2.3. Metadata last update	20 May 2011

3. Statistical presentation Top

3.1. Data description

There are three categories of LFS results:

1. Main indicators on "educational attainment" and "transition from education to work, early leavers from education and training"

The LFS education-related indicators on early leavers from education and training, education attainment level and young people neither in employment nor in education and training (NEET) are a collection of annual series based on the quarterly results of the EU Labour Force Survey (EU-LFS). They are published in the section 'main indicators'. The data source, EU-LFS is, where necessary, adjusted and enriched in various ways, in accordance with the specificities of an indicator, including the following:

- correction of the main breaks in the LFS series,

- estimation of the missing values, (i.e. in case of missing quarters, annual results and EU aggregates are estimated using adjusted quarterly national labour force survey data or interpolations of the EU Labour Force Survey data with reference to the available quarter(s))

Early leavers from education and training and tertiary educational attainment are also Europe 2020 Indicators. Early school leavers are part of the Sustainable Development Indicators.

2. Detailed tables

Beside these main results, LFS detailed tables are also available. The results might differ from the 'main indicators' series are the data are not adjusted as explained above.

Dissemination of national reference metadata

eurostat EUROPEAN COMMISSION

Harmonised indices of consumer prices (HICP)

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. Dissemination format
11. Accessibility of documentation
12. Quality management
13. Relevance
14. Accuracy and reliability
15. Timeliness and punctuality
16. Comparability
17. Coherence
18. Cost and burden
19. Data revision
20. Statistical processing
21. Comment

National metadata

National reference metadata

National metadata produced by countries and released by Eurostat

Belgium	Bulgaria	Czech Republic	Denmark
Germany	Estonia	Ireland	Greece
Spain	France	Italy	Cyprus
Latvia	Lithuania	Luxembourg	Hungary
Malta	Netherlands	Austria	Poland
Portugal	Romania	Slovenia	Slovakia
Finland	Sweden	United Kingdom	Iceland
Norway	Switzerland	Croatia	Turkey

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

Download

1. Contact

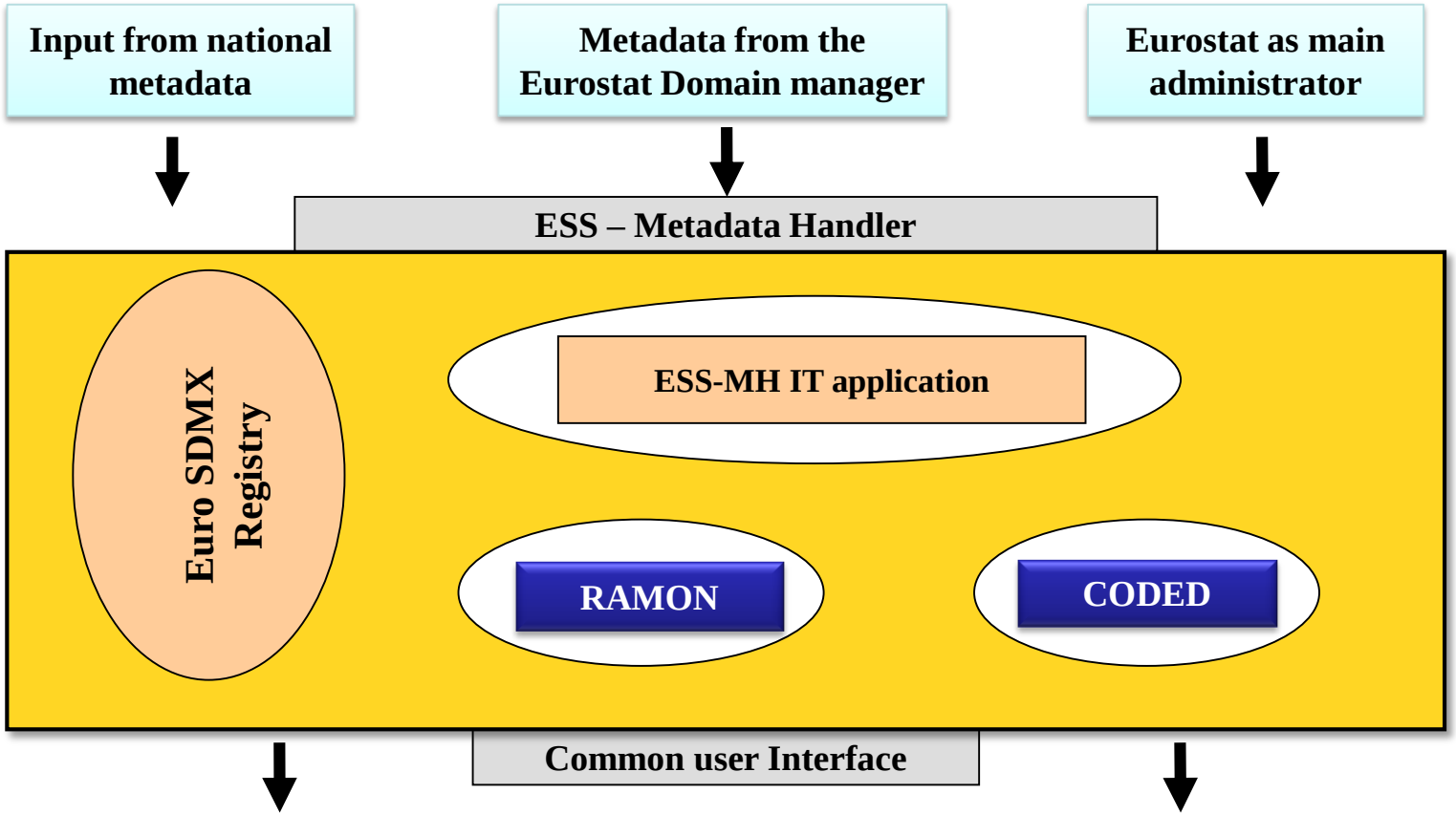
Top

1.1. Contact organisation	Eurostat, the statistical office of the European Union
1.2. Contact organisation unit	Unit C-5: Price statistics; Purchasing Power Parities. Housing statistics
1.5. Contact mail address	2920 Luxembourg LUXEMBOURG

2. Metadata update

Top

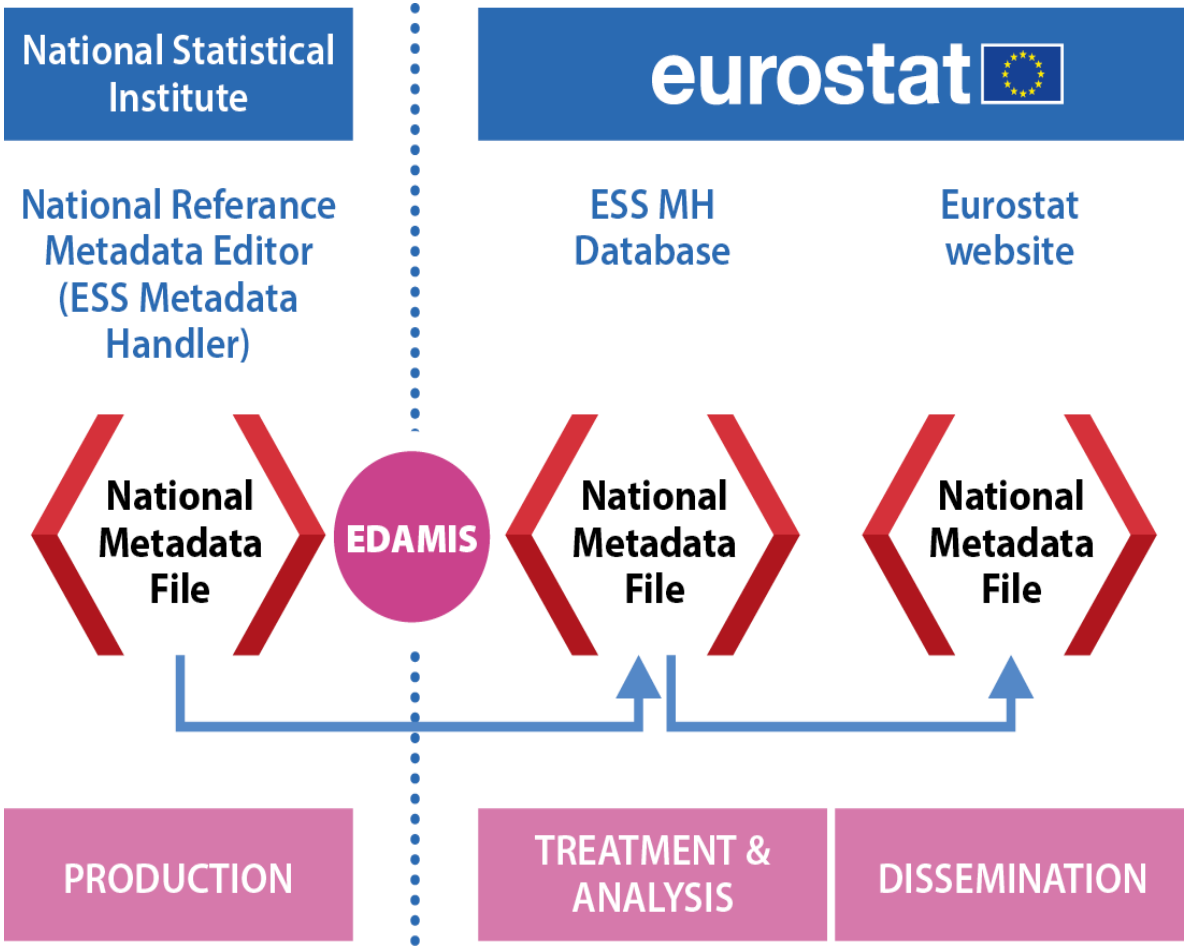
The ESS Metadata Handler
The business process



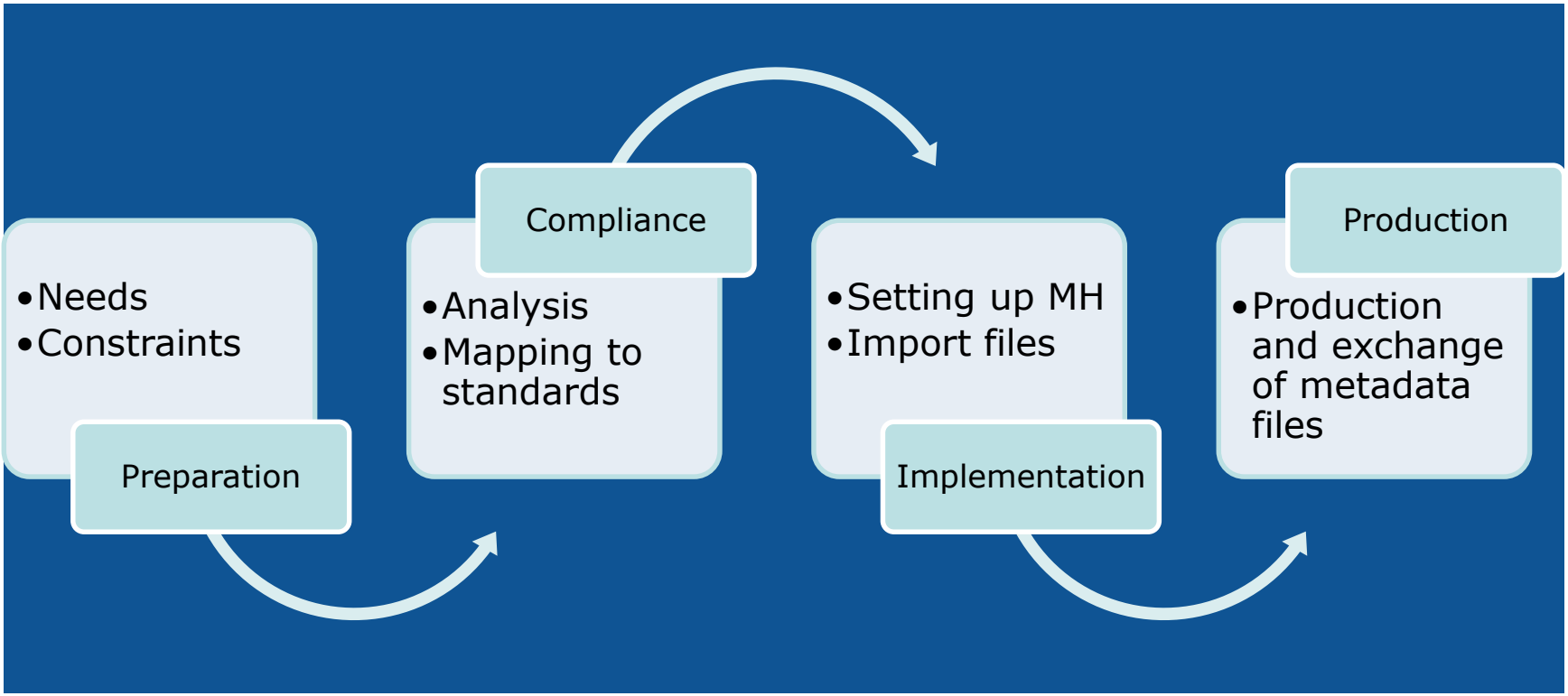
What is the ESS Metadata Handler?

- The ESS Metadata Handler is a web based application for reference metadata production, exchange and dissemination in the ESS;
- It implements the ESS metadata standards (ESMS, ESQRS, EPMS, etc.)
- It replaces EMIS (used in Eurostat) and NRME (for countries);
- It is continuously improved based on users' feedback and new business requirements;
- It is in production since 31 January 2014.

Transmission via EDAMIS



The ESS reference metadata implementation process



Practical Example

Example for reference metadata

2 **The supply side: Accommodation statistics (Annex I of Regulation 692/2011)** **57**

2.1 Basic methodological issues .....

2.1.1 Position of accommodation statistics within the syste

2.1.2 Statistical unit.....

2.2 Scope of observation.....

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Let's select a specific topic from which we'll create a metadata report

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2 The supply side: Accommodation statistics (Annex I of Regulation 692/2011)

Content of the selected topic

2.1 Basic methodological issues

2.1.1 Position of accommodation statistics within the system of tourism statistics

Accommodation (rented or non-rented) is a core tourism sector even if it is relevant for one part of visitors only (i.e. tourists = overnight visitors). The economic importance of this sector can be seen from the results of TSA of some countries where accommodation services accounted for between 15 to 20% of total internal tourism expenditure. Also when looking at the physical flows, there were over 2.3 billion nights spent at collective accommodation establishments in the EU during the year 2010[43].

Accommodation statistics is a key part of the system of tourism statistics in the EU and has a long history of data collection. Annex I of the Regulation deals with accommodation and includes 4 sections focusing on accommodation statistics: section 1 and 2 include the requirements concerning rented accommodation (capacity and occupancy respectively), section 4 includes the (optional) requirements concerning non-rented accommodation ; section 3 includes classifications.

Demand side estimates have shown that observing the
can only give a very partial picture: this segment rep
Other trips are spent in less formal or small establishm
many Member States), in owned dwellings (secondary
who offer accommodation for free. In order to complete
annual estimate of the so-called "below threshold estab
the nights spent in non-rented accommodation (see furt

2.1.2 Statistical unit

A statistical unit refers to one member of a set of entities being studied. For collecting data on accommodation statistics the statistical unit can be as follows:

- Enterprise (e.g. hotel chain),
- Establishment (local unit),
- Local kind-of-activity unit,
- Dwelling used for non-rented accommodation to visitors.

In some cases, the statistical unit can be different from the reporting unit (e.g. local authorities or tourism bodies reporting on the establishments in their area, or a hotel chain replying for all their establishments in a centralised way, or a visitor when the data is collected by means of a household or border survey).

2.2 Scope of observation

📖 Article 4(1, 2); Annex I

Content of the selected topic

Reference 2.2-1: Regulation concerning European statistics on tourism – Scope of observation

The scope of observation for the requirements laid down in

(a) Article 3(1)(a) *[= internal tourism, in terms of the capacity and occupancy of tourist accommodation establishment]* shall be all tourist accommodation establishments as defined in Article 2(1)(l)[46], unless otherwise specified in Annex I.

(b) Article 3(1)(b) *[= internal tourism, in terms of tourism nights spent in non-rented accommodation]* shall be all tourism nights by residents and non-residents spent in non-rented accommodation.

2.2.1 Tourist accommodation establishment

📖 Annex I – Section 1, 2 and 3

The scope of observation (or the target population) in accommodation statistics includes all tourist accommodation establishments providing, as a paid service (although the price might be partially or fully subsidised), short-term or short-stay accommodation services.

Tourism accommodation establishments are classified and described in groups according to NACE Rev. 2[47] classification as follow:

- 55.1 (hotels and similar accommodation),
- 55.2 (holiday and other short-stay accommodation) and
- 55.3 (camping grounds, recreational vehicle parks and trailer parks).

2.2.1.1 NACE 55.1 – Hotels and similar accommodation

This class includes the provision of accommodation, typically on a daily or weekly basis, principally for short stays by visitors. This includes the provision of furnished accommodation in guest rooms and suites. Services include daily cleaning and bed-making. A range of additional services may be provided such as food and beverage services, parking, laundry services, swimming pools and exercise rooms, recreational facilities as well as conference and convention facilities.

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Defining a Metadata Structure Definition

The Tasks

1. Analysis of the entire set of metadata in order to identify and document the "Concepts" for which metadata are to be reported or disseminated – Concepts Scheme.
2. Determine the structure of the "Metadata Report" in terms of the concepts used, the hierarchy of the concepts when used in the report, and their "representation" (e.g. is a code list used, is the format free text?) – MSD & Reporting Structure.
3. Specify the "object type" to which the metadata are to be attached, and how this object type is identified: knowledge of the SDMX Information model is useful here (as the metadata can only be attached to object types that can be identified in terms of the object types that exist in the information model).

Metadata Report Structure – Content Metadata

2 The supply side: Accommodation statistics (Annex I of Regulation 692/2011)

2.1 Basic methodological issues

BASIC_METH_ISSUES

2.1.1 Position of accommodation statistics within the system of tourism statistics

POS_ACC_TOUR

Accommodation (rented or non- …elevant for one part of visitors only (i.e. tourist… …e of this sector can be seen from the results of TSA of some countries where accommodation services accounted for between 15 to 20% of total internal tourism expenditure. Also when looking at the physical flows, there were over 2.3 billion nights spent at collective accommodation establishments in the EU during the year 2010[43].

Accommodation statistics is a key part of the system of tourism statistics in the EU and has a long history of data collection. Annex I … includes 4 sections focusing on accomm… requirements concerning rented accomm… section 4 includes the (optional) requiremer… 3 includes classifications.

Demand side estimates have shown that ob… can only give a very partial picture: this se… Other trips are spent in less formal or smal… many Member States), in owned dwellings … who offer accommodation for free. In order … annual estimate of the so-called "below thre… the nights spent in non-rented accommodati…

2.1.2 Statistical unit

STAT_UNIT

A statistical unit refers to … …mber of a set of entities being studied. For collecting data on accommodation statisti… …follows:

- Enterprise (e.g…
- Establishment (local unit),
- Local kind-of-activity unit,
- Dwelling used for non-rented accommodation to visitors.

In some cases, the statistical unit can be different from the reporting unit (e.g. local authorities or tourism bodies reporting on the establishments in their area, or a hotel chain replying for all their establishments in a centralised way, or a visitor when the data is collected by means of a household or border survey).

2.2 Scope of observation

📖 Article 4(1, 2); Annex I

SCOPE_OBS

Reference 2.2-1: Regulation concerning European statistics on tourism – Scope of observation

The scope of observation for the requirements laid down in

(a) Article 3(1)(a) *[= internal tourism, in terms of the capacity and occupancy of tourist accommodation establishment]* shall be all tourist accommodation establishments as defined in Article 2(1)(l)[46], unless otherwise specified in Annex I.

(b) Article 3(1)(b) *[= internal tourism, in terms of tourism nights spent in non-rented accommodation]* shall be all tourism nights by residents and non-residents spent in non-rented accommodation.

2.2.1 Tourist accommodation establishment

📖 Annex I – Section [illegible] and 3

TOUR_ACC_ESTAB

The scope of observati[illegible]ion statistics includes all tourist accommodation e[illegible]though the price might be partially or fully subsidis[illegible] services.

Tourism accommodation establishments are classified and described in groups according to NACE Rev. 2[47] classification as follow:

- 55.1 (hotels and similar accommodation),
- 55.2 (holiday and other s[illegible]and
- 55.3 (camping grounds, [illegible]nd trailer parks).

NACE_55_1

2.2.1.1 NACE 55.1 – Hotels and similar accommodation

This class includes the provision of accommodation, typically on a daily or weekly basis, principally for short stays by visitors. This includes the provision of furnished accommodation in guest rooms and suites. Services include daily cleaning and bed-making. A range of additional services may be provided such as food and beverage services, parking, laundry services, swimming pools and exercise rooms, recreational facilities as well as conference and convention facilities.

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Metadata Report Structure – Concept Scheme

The following concepts are derived from this example:

CONTACT

- CONTACT_ORG
- CONTACT_ORG_UNIT
- CONTACT_MAIL_ADDRESS

BASIC_METH_ISSUES

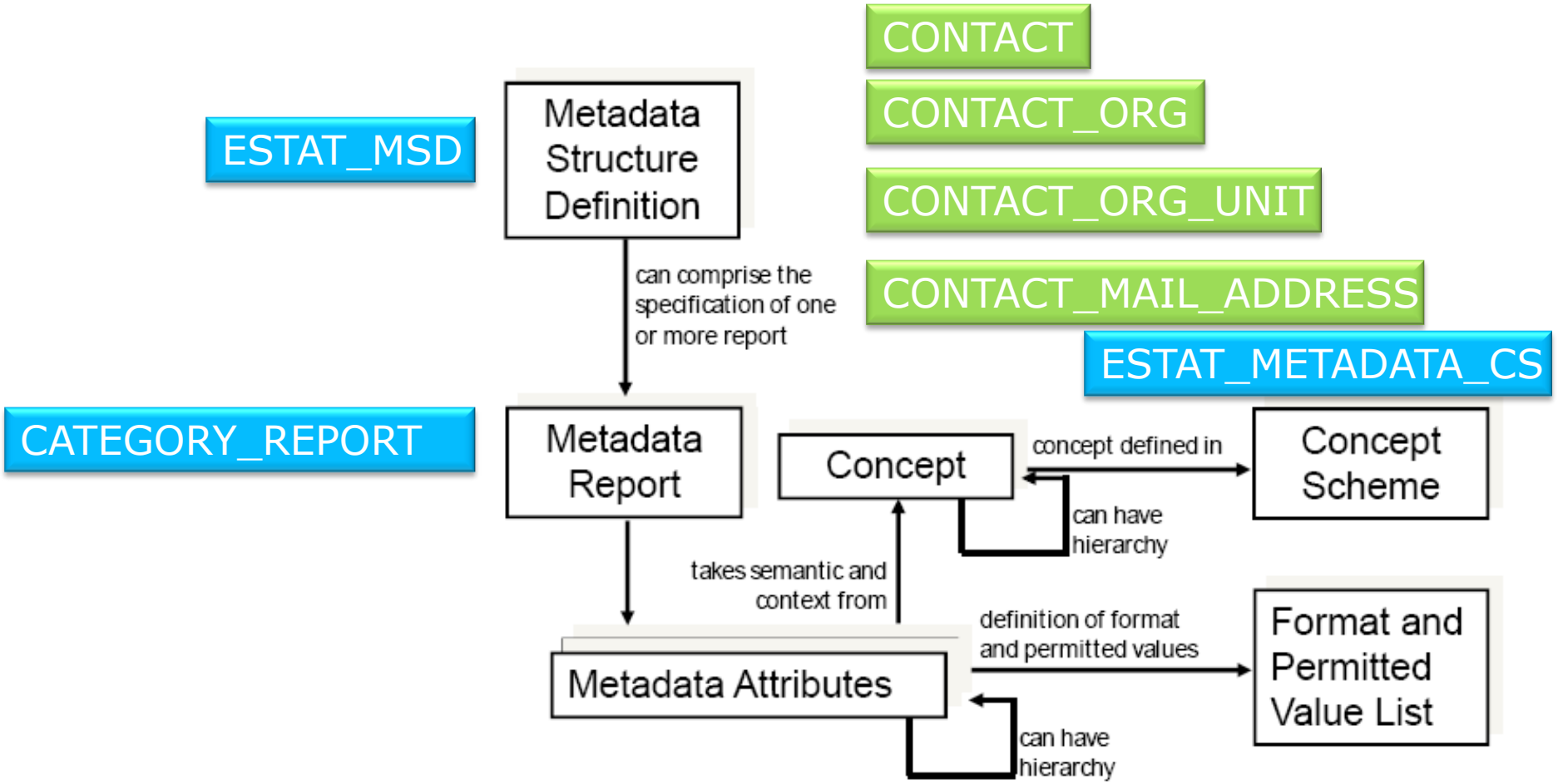
- POS_ACC_TOUR
- STAT_UNIT

SCOPE_OBS

- TOUR_ACC_ESTAB
- NACE_55_1

Metadata Report Structure – Bringing it Together

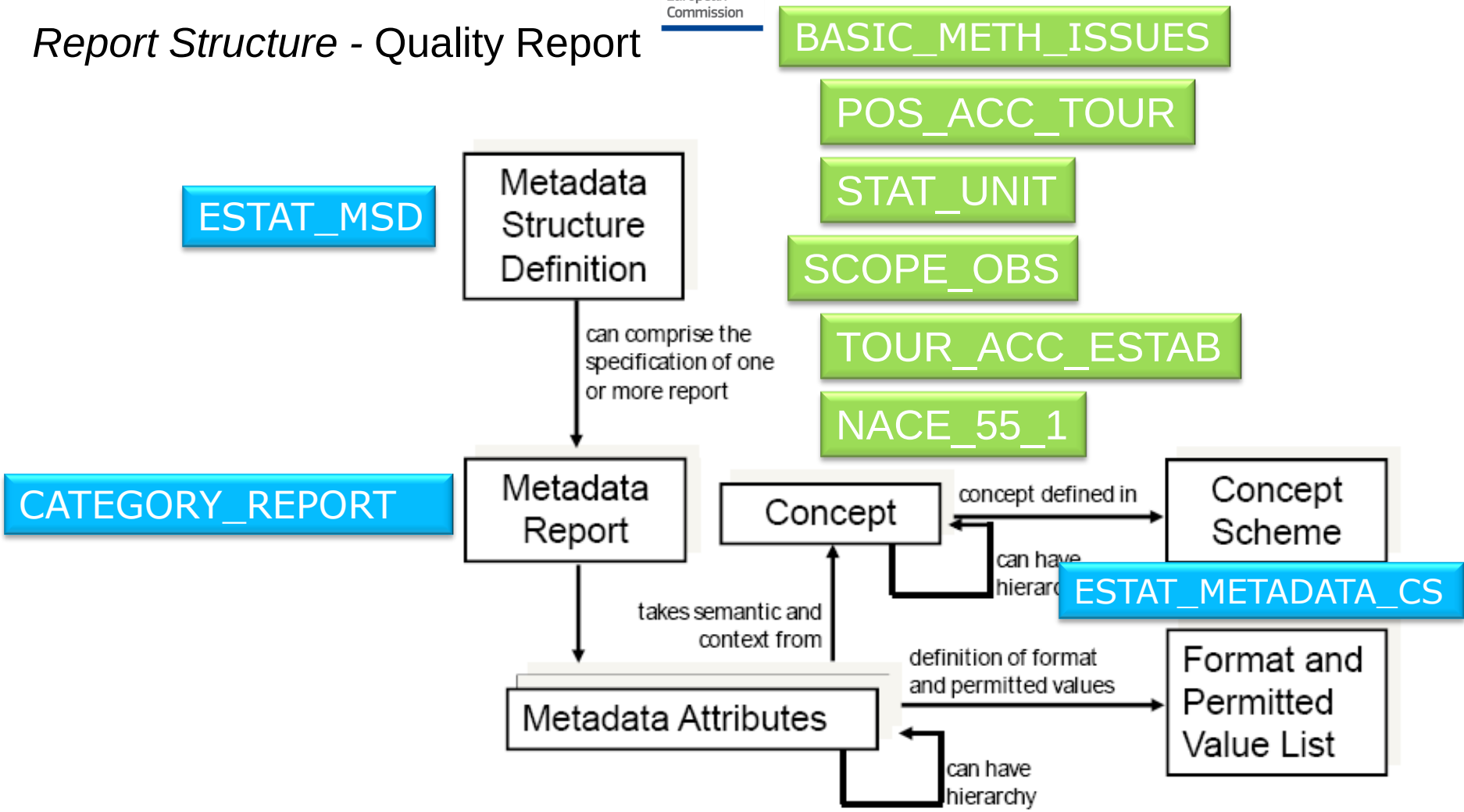
Report Structure - Contact Report



METADATA REPORT STRUCTURE – BRINGING IT TOGETHER

European Commission

Report Structure - Quality Report



Metadata Set (FLOW): Structure

References to :

- **a Metadata Structure Definition (MSD)**
- **a Report Structure**
- **a Target Identifier**

Defines:

- **The actual values of the target objects**

Comprises:

- **The Reported Attributes and their corresponding Values**
- **These Attributes may be:**

  coded
  text
  date/time
  number etc.

Metadata Set – General Schematic

CATEGORY_REPORT

CONTACT

CONTACT_ORG

Unit G3 Short-term statistics; tourism

CONTACT_ORG_UNIT

Eurostat, Statistical Office of the European Communities

CONTACT_MAIL_ADDRESS

http://epp.eurostat.ec.europa.eu/portal/page/portal/help/user_support

BASIC_METH_ISSUES

POS_ACC_TOUR

Accommodation (rented or non-rented) is a core tourism sector even if it is relevant for one part of visitors only (i.e. tourists = overnight visitors). The economic importance of this sector can be seen from the results of TSA of some countries where accommodation services accounted for between 15 to 20% of total internal tourism expenditure. Also when looking at the physical flows, there were over 2.3 billion nights spent at collective accommodation establishments in the EU during the year 2010[43].

Accommodation statistics is a key part of the system of tourism statistics in the EU and has a long history of data collection. Annex I of the Regulation deals with accommodation and includes 4 sections focusing on accommodation statistics: section 1 and 2 include the requirements concerning rented accommodation (capacity and occupancy respectively), section 4 includes the (optional) requirements concerning non-rented accommodation ; section 3 includes classifications.

Demand side estimates have shown that observing the tourism flows in rented accommodation can only give a very partial picture: this segment represents around 50% of the trips made. Other trips are spent in less formal or small establishments (that fall outside the scope set by many Member States), in owned dwellings (secondary residence) and with friends or relatives who offer accommodation for free. In order to complete the picture, the Regulation foresees an annual estimate of the so-called "below threshold establishments" (see further, 2.2.1.5) and of the nights spent in non-rented accommodation (see further, 2.2.2, 2.6 and 2.7).

METADATA SET – METADATA FILE

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<genericmetadata:MetadataSet>
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<genericmetadata:MetadataStructureAgencyRef>EUROSTAT</genericmetadata:MetadataStructureAgencyRef>
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    <genericmetadata:AttributeValueSet>
    <genericmetadata:TargetRef>CATEGORY</genericmetadata:TargetRef>
    <genericmetadata:TargetValues>
    <genericmetadata:ComponentValue
object="Category">Structural_Indicators</genericmetadata:ComponentValue>
    <genericmetadata:ComponentValue
object="DataProvider">Eurostat</genericmetadata:ComponentValue>
    </genericmetadata:TargetValues>
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    <genericmetadata:ReportedAttribute conceptID="CONTACT_ORG">
        <genericmetadata:Value>Unit C2 National accounts : production</genericmetadata:Value>
    </genericmetadata:ReportedAttribute>
    <genericmetadata:ReportedAttribute conceptID="CONTACT_ORG_UNIT">
        <genericmetadata:Value>Unit C5 Validation of public accounts</genericmetadata:Value>
    </genericmetadata:ReportedAttribute>
    <genericmetadata:ReportedAttribute conceptID="CONTACT_MAIL_ADDRESS">
        <genericmetadata:Value>http://epp.eurostat.ec.europa.eu/portal/page/portal/help/user_support
        </genericmetadata:Value>
    </genericmetadata:ReportedAttribute>
</genericmetadata:ReportedAttribute>
</genericmetadata:AttributeValueSet>
</genericmetadata:MetadataSet>
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METADATA SET – ESMS EXAMPLE

eurostat EUROPEAN COMMISSION

Capacity of collective tourist accommodation : establishments, bedrooms and bedplaces

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. Dissemination format
11. Accessibility of documentation
12. Quality management
13. Relevance
14. Accuracy and reliability
15. Timeliness and punctuality
16. Comparability
17. Coherence
18. Cost and burden
19. Data revision
20. Statistical processing
21. Comment

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

1. Contact

Top

1.1. Contact organisation	Eurostat, the statistical office of the European Union

2. Metadata update

Top

2.1. Metadata last certified	28 March 2011
2.2. Metadata last posted	11 October 2010
2.3. Metadata last update	17 August 2011

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. Dissemination format
11. Accessibility of documentation
12. Quality management
13. Relevance
14. Accuracy and reliability
15. Timeliness and punctuality
16. Comparability
17. Coherence
20. Statistical processing
21 Comment

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European Commission

Questions?