EUROPEAN CONFERENCE ON QUALITY IN OFFICIAL STATISTICS

2024 ESTORIL - PORTUGAL

Italian National Statistical system: Quality Reporting matters at every level

ANDREA BRUNI, PAOLA GIORDANO
ISTAT - DCRE

6 June, 2024
Speed Talk Session 9 - Coordination

eurostat

The conference is partly financed by the European Union

Whats on?

INSTITUTO NACIONAL DE ESTATÍSTICA STATISTICS PORTUGAL
eurostat
The conference is partly financed by the European Union

- Istat is the coordinator of the National Statistical System (Sistan) and support the improvement of the quality of statistics produced within the Sistan.
- Sistan encompasses 3,305 offices, including 14 entities, namely Istat and the Other National Authorities (ONAs): ONAs adhere to the ESS Quality Framework (ESCoP, ESS QAF, etc.).
- Istat adopted a strategy for adapting the tools from the ESS quality framework to suit the specific needs of Not-ONAs entities.

SISTAN
SISTEMA STATISTICO NAZIONALE
la rete statistica per il paese

INSTITUTO NACIONAL DE ESTATÍSTICA STATISTICS PORTUGAL
eurostat
The conference is partly financed by the European Union

Not – ONAs: what has been done?

ESS documents and parallel Italian framework.

ESS reference document	Corresponding Italian document	Release Year (Italian document)
European Statistics Code of Practice	Codice italiano delle statistiche ufficiali (Italian Code of official statistics)	2010
European Statistics Code of Practice - revised edition 2017	Codice italiano per la qualità delle statistiche ufficiali (Italian code for the quality of official statistics)	2021
Quality Assurance Framework - revised edition 2019	Guida per l'implementazione del Codice italiano della qualità delle statistiche ufficiali (Guide for the implementation of the Italian Code for the quality of official statistics)	2023

INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL
eurostat
The conference is partly financed by the European Union

Not – ONAs: in progress

Tend toward the ESS,
in 2021 both the Steering and Coordinating Committee for Statistical Information (Comstat) and the Commission on Quality Assurance of Statistical Information (Cogis), suggested that Istat should implement the Handbook for quality and metadata reports, targeting the Not-ONAs.

EDUCATION AND TRAINING
National Reference Metadata in ESS Standard for Quality Reports Structure (ESQRS)
Compiling agency: Ministry of Education

Eurostat metadata
Reference metadata

1. Contact
2. Statistical presentation
3. Statistical processing
4. Quality management
5. Relevance
6. Accuracy and reliability
7. Timeliness and punctuality
8. Coherence and comparability
9. Accessibility and clarity
10. Cost and Burden
11. Confidentiality
12. Comment

Related Metadata
Annexes (including footnotes)

For any question on data and metadata, please contact: EUROPEAN STATIST

1. Contact

1.1. Contact organisation	Ministry of Education
1.2. Contact organisation unit	Statistical office
1.5. Contact mail address	Viale Trastevere, 76/A 00153 Roma IT

2. Statistical presentation

2.1. Data description

A general description of the statistical process and its outputs, and their

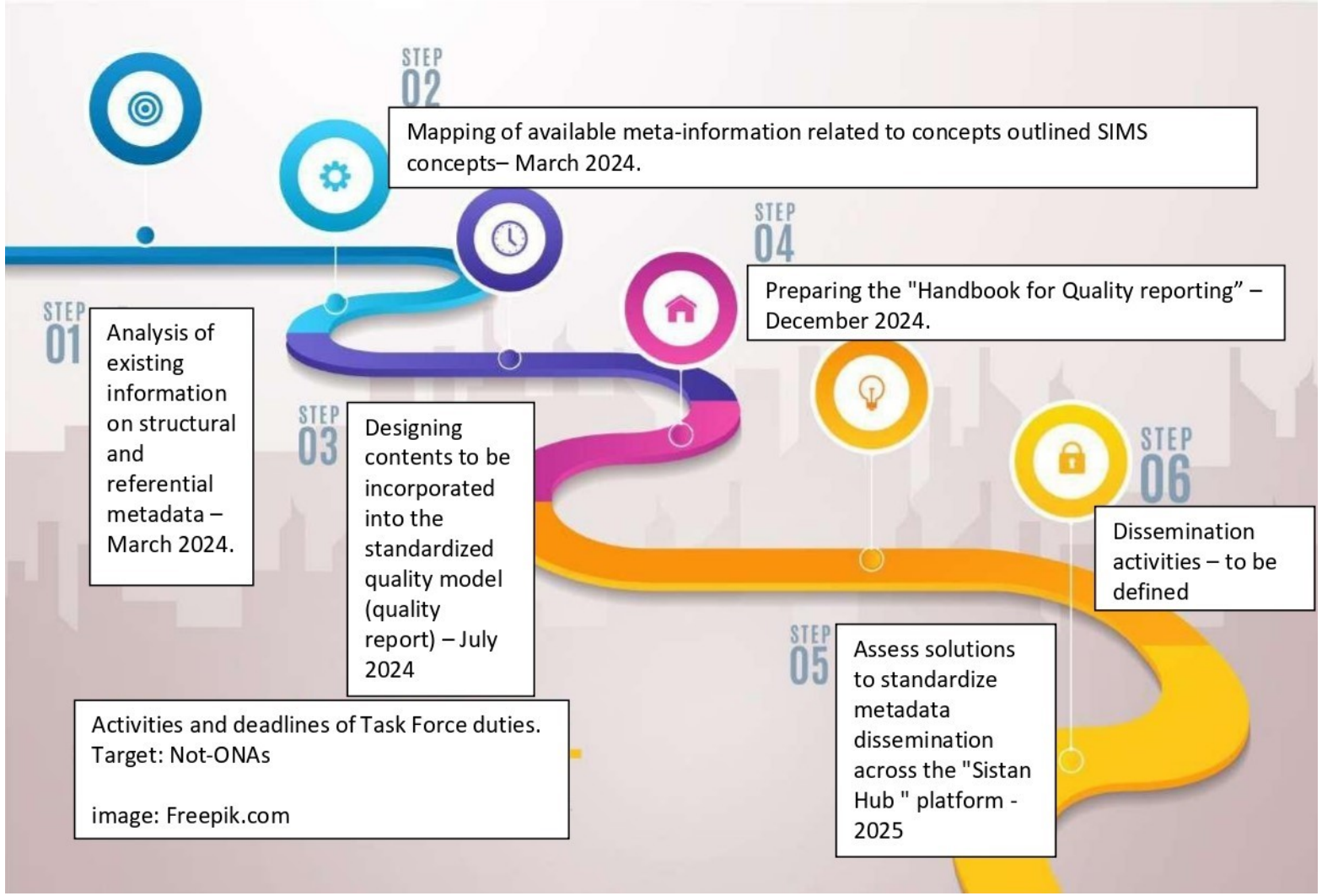
NATIONAL EDUCATION SYSTEM
The following documents provide general information on the educational sys
General link to Eurydice:
https://eacea.ec.europa.eu/national-policies/eurydice/national-descript
National system broad overview:
https://eacea.ec.europa.eu/national-policies/eurydice/content/italy_en
National Education System Description:
http://eurydice.indire.it/

European Statistical System handbook for quality and metadata reports | 2021 re-edition

MANUALS AND GUIDELINES | eurostat

INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL
eurostat
The conference is partly financed by the European Union

Handbook pathway



The conference is partly financed by the European Union

Some results/1

The analysis began with the **National Statistical Programme (NSP),** comprising **805 statistical works** of various typologies:

- 714 Statistics (274 from Istat and 440 from other Sistan entities);
- 62 Design studies (36 from Istat and 26 from other Sistan entities);
- 29 Statistical Information Systems (10 from Istat and 19 from other Sistan entities).

Step 1:

- Analysed **379 out of the 440 statistics** (focusing on the most relevant non-Istat ones);

- found **metadata for 213 of them (56.2%)** on the scouted official websites.

Step 2:

The **mapping activity with the 99 SIMS concepts** is reported in next tables (only SIMS items having **3 or more** occurrences are reported).

The conference is partly financed by the European Union

Some results/2

ID	ID Description	Concept Name	n.
S.1.1	CONTACT_ORGANISATION	Contact organisation	40
S.1.2	ORGANISATION_UNIT	Contact organisation unit	34
S.1.3	CONTACT_NAME	Contact name	26
S.1.4	CONTACT_FUNCT	Contact person function	17
S.1.5	CONTACT_MAIL	Contact mail address	17
S.1.6	CONTACT_EMAIL	Contact e-mail address	28
S.1.7	CONTACT_PHONE	Contact phone number	21
S.2.3	META_LAST_UPDATE	Metadata last update	3
S.3.1	DATA_DESCR	Data description	202
S.3.2	CLASS_SYSTEM	Classification system	92
S.3.3	COVERAGE_SECTOR	Sector coverage	39
S.3.4	STAT_CONC_DEF	Statistical concepts and definitions	148
S.3.5	STAT_UNIT	Statistical unit	152
S.3.6	STAT_POP	Statistical population	119
S.3.7	REF_AREA	Reference area	116
S.3.8	COVERAGE_TIME	Time coverage	113
S.3.9	BASE_PER	Base period	7
S.4	UNIT_MEASURE	Unit of measure	48
S.5	REF_PERIOD	Reference period	46
S.6.1	INST_MAN_LA_OA	Legal acts and other agreements	92
S.6.2	INST_MAN_SHAR	Data sharing	4
S.7.1	CONF_POLICY	Confidentiality - policy	11
S.7.2	CONF_DATA_TR	Confidentiality - data treatment	5
S.8.1	REL_CAL_POLICY	Release calendar	40
S.8.2	REL_CAL_ACCESS	Release calendar access	8
S.8.3	REL_POL_US_AC	User access	3
S.9	FREQ_DISS	Frequency of dissemination	52

INSTITUTO NACIONAL DE ESTATÍSTICA STATISTICS PORTUGAL
eurostat
The conference is partly financed by the European Union

Some results/3

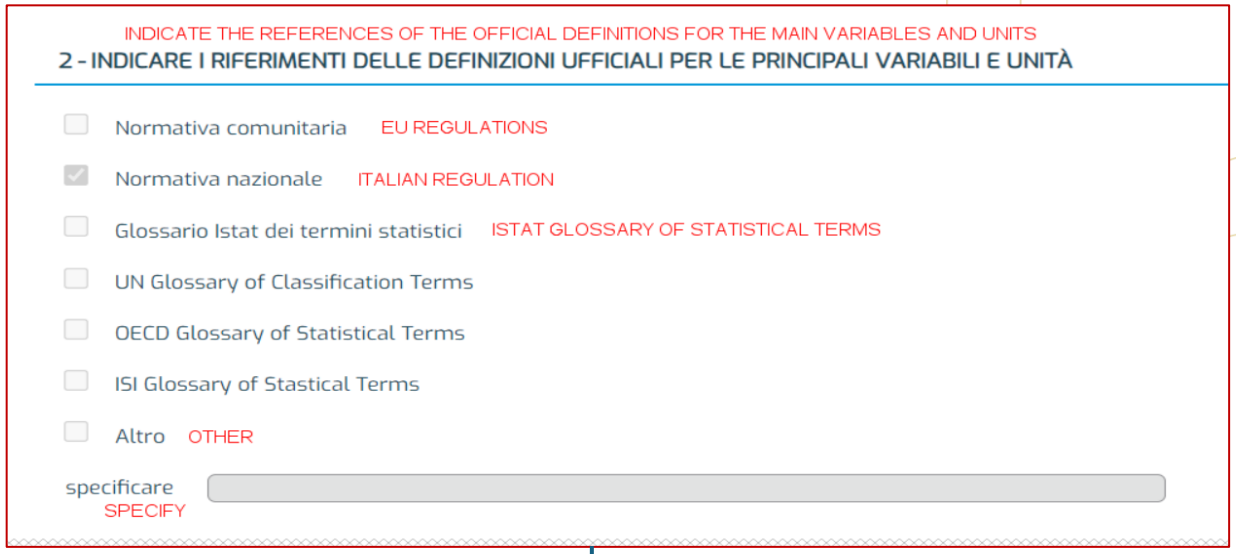
ID	ID Description	Concept Name	n.
S.10.1	NEWS_REL	News release	71
S.10.2	PUBLICATIONS	Publications	69
S.10.3	ONLINE_DB	On-line database	102
S.10.4	MICRO_DAT_ACC	Micro-data access	10
S.10.5	DISS_OTHER	Other	8
S.10.6	DOC_METHOD	Documentation on methodology	29
S.10.7	QUALITY_DOC	Quality documentation	4
S.11.1	QUALITY_ASSURE	Quality assurance	10
S.11.2	QUALITY_ASSMNT	Quality assessment	12
S.13.1	ACCURACY_OVERALL	Overall accuracy	11
S.13.3.3	NONRESPONSE_ERR	Non response error	4
S.13.3.3.1	UNIT_NONRESPONSE_RATE	A4. Unit non-response - rate for P	3
S.14.1	TIMELINESS	Timeliness and TP2. Time lag - final results for U	42
S.15.1	COMPAR_GEO	Comparability - geographical	3
S.18.1	SOURCE_TYPE	Source data	132
S.18.2	FREQ_COLL	Frequency of data collection	58
S.18.3	COLL_METHOD	Data collection	162
S.18.4	DATA_VALIDATION	Data validation	56
S.18.5	DATA_COMP	Data compilation	35
S.19	COMMENT_DSET	Comment	8

Next steps/1

INSTITUTO NACIONAL DE ESTATÍSTICA STATISTICS PORTUGAL
eurostat
The conference is partly financed by the European Union

Simultaneously, there is an **exploration underway to develop national concepts that complement those within SIMS**.

One operational solution under consideration involves leveraging **the information already collected by Istat within the NSP information system.** Here, managers of Sistan statistical offices furnish comprehensive data crucial for the definition of the National Statistical Programme.



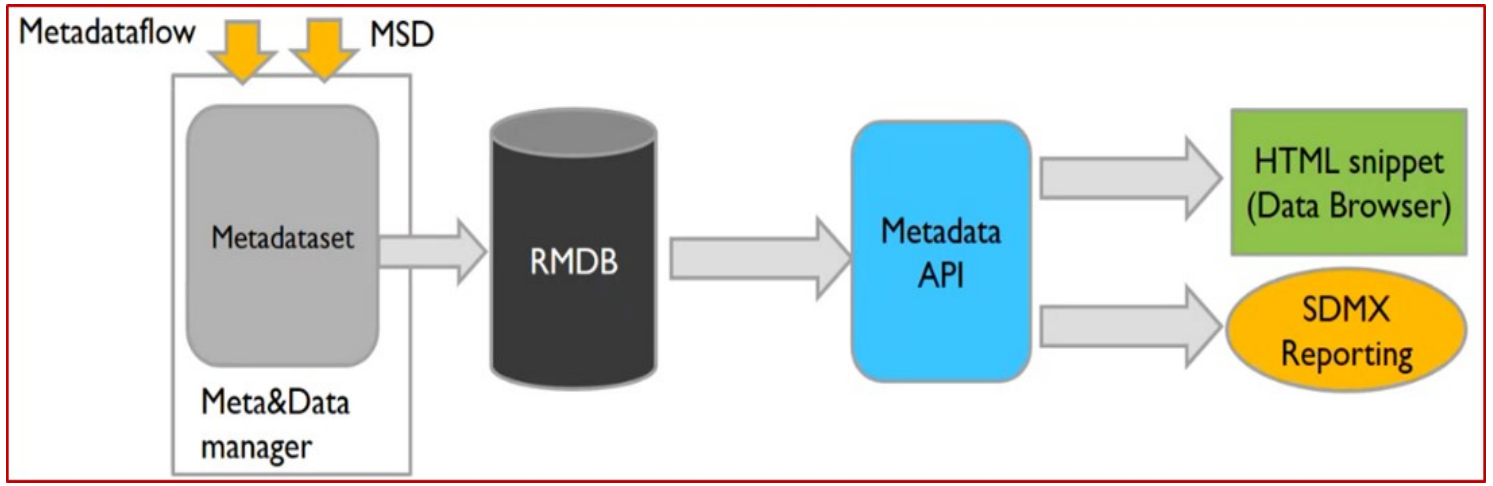
Implementing this practice would alleviate the **burden** for quality report compilers. It entails providing a **pre-compiled template** where a significant portion of the required information is already included.

The conference is partly financed by the European Union

Next steps/2

In addition, in its efforts to enhance the tools for disseminating official statistics, Istat has made significant strides, notably through the **development of a native SDMX open-source software**. This innovative framework has enabled the implementation of the “Sistan Hub" project, a centralized platform for the dissemination of aggregate data produced by the Sistan entities.

Regarding the management of reference metadata, **the software provides a dedicated module for handling Metadata Structure Definitions (MSDs), enabling the compilation and publication of quality reports in SDMX-ML v2.1 format**, according to the functional flow shown in the following diagram:



The conference is partly financed by the European Union

Acknowledgment

The Authors would like to thank the components of the Task Force Gabriele Ascari, Manuela Bartoloni, Francesca Budano, Daniela Fusco, Maria Antonietta Liguori, Giorgia Simeoni, Loredana Amilcare, Chiara Capogrossi.

References

Comstat (2018). Atto di indirizzo (Guiding Act) n.3. https://www.sistan.it/fileadmin/Repository/Home/NORME_E_PROCEDURE/ORGANIZZAZIONE_E_FUNZIONAMENTO/UFFICI_DI_STATISTICA/Comstat_Atto%20di%20indirizzo%203_2018.pdf

Eurostat (2023). Italy Peer Review Report on compliance with the European Statistics Code of Practice and further improvement and development of the national statistical system https://www.istat.it/it/files//2021/10/peer-review-report-2023.pdf

The conference is partly financed by the European Union

Thanks!

Andrea Bruni, Istat, anbruni@istat.it

Paola Giordano, Istat, pgiordano@istat.it

Istat