

ESS Standard Quality Reporting Implementation: the Point of View of a National Statistical Institute

Session 17 – Quality Reporting

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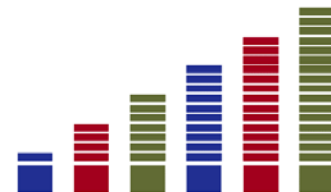
simeoni@istat.it

Outline

Harmonisation of Standard Quality Reporting (SQR) at ESS level

Istat work on national implementation

Design of national dissemination of standard quality reports

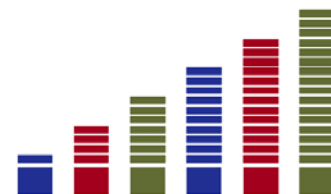


Harmonisation of SQR at ESS level

From the beginning of 2000s till now working groups, task forces, expert groups have worked for the improvement of cross-domain harmonisation of ESS standard quality reporting and for its implementation

Let's consider:

- The results achieved
- What is still missing



Harmonisation of SQR at ESS level

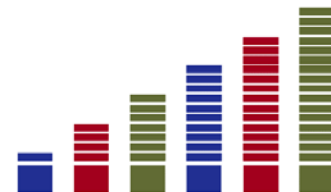
Main results:

SIMS v. 2.0: “a dynamic and unique inventory of ESS standard reference metadata statistical concepts with definitions and reporting guidelines”

ESMS 2.0 and **ESQRS 2.0:** respectively user-oriented and producer-oriented templates for quality reports, derived from SIMS

ESS QPI: the set of standard quality and performance indicators

National implementation plan for ESS SQR: deadline 2018

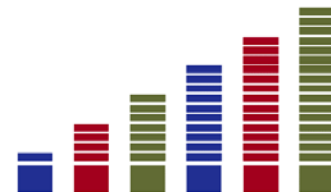


Overview of activities at ESS level

Main results:

ESS-MH: Eurostat tool to compile, transmit and publish quality reports

Clear rules for **interoperability** among ESS-MH and national metadata systems



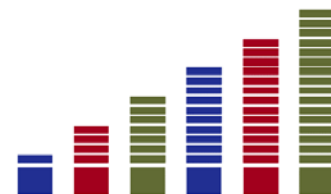
Harmonisation of SQR at ESS level

The «to-do-list»:

ESTP Advanced course on quality reporting (24-25 November 2016)

ESS Metadata and Quality Reporting Handbook

Find solutions for domain specific reporting needs



Istat work on national implementation

- SIDI/SIQual Istat official system for reference metadata and quality information
- Most of information required by ESMS and ESQRS already documented in SIDI/SIQual
- Grant 2012 “Horizontal and vertical integration: Implementing technical and statistical standards in the European Statistical System”

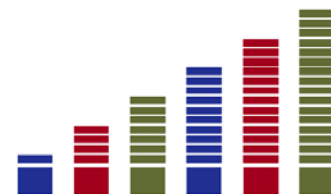


Development of a SIDI/SIQual subsystem for quality reporting



Istat work on national implementation

- The subsystem includes:
 - procedures that extract information from SIDI/SIQual database and reorganise it according to ESMS and ESQRS concepts' requirements
 - mapping functionality to associate dinamically procedures and concepts
 - partial automatic pre-compilation of the report and editor to complete compilation
 - creation of SDMX file

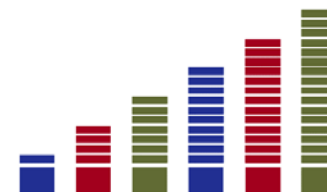


Istat work on national implementation

Example:

- SIMS guideline for the concept «Data collection»

20.3	Data collection	COLL_METHOD	Systematic process of gathering data for official statistics.	<p>available for the European Statistical system.</p> <p>Describe the method used, in case of surveys, to gather data from respondents (e.g. sampling methods, postal survey, CAPI, on-line survey, etc.). Some additional information on questionnaire design and testing, interviewer training, methods used to monitor non-response etc. should be provided here. Questionnaires used should be annexed (if very long: via hyperlink).</p> <p>Describe the procedure for checking and</p>
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Istat work on national implementation

Example:

- Information in SIDI/SIQual

Replanning questionnaire form (e.g. from paper to electronic form) (Edition: 31/12/2007)

Replanning questionnaire form (e.g. from paper to electronic form) (Edition: 31/12/2009)

Replanning questionnaire form (e.g. from paper to electronic form) (Edition: 31/12/2007)

Stratified random sampling (since 31/12/1996)

Data collection mode

Close tree

Mail self-administered data collection

Mail self-administered data collection

Control on unit nonresponse

Prerequisites for control

Recording and coding (31/12/2003)

Use of the monitorin

Activities for preventing

Survey presentation letter

Guarantees on statistical

Self-administered data collection via elect

Self-administered data collection by e

web site INDATA (since 31/12/2004)

Control on unit nonresponse

Activities for preventing unit nonresponse

Survey presentation letter signed by Istat President (since 31/12/2004)

Guarantees on statistical confidentiality (since 31/12/2004)

> home > Complete list > Questionnaires

[S] - Statistics by product (Prodcom)

since 31/12/2007

PRODCOM

Type of mean: Paper/electronic

Observed units: Industrial products, Local units

Edition: 31/12/2011

Questionario PRODCOM on-line

Type of mean: Electronic

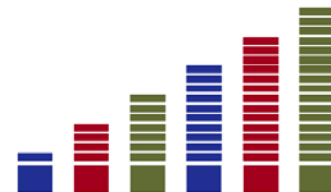
Observed units: Industrial products

Edition: 31/12/2010

PRODCOM

Type of mean: Electronic

Observed units: Energy products, Industrial products



Istat work on national implementation

Example:

- Mapping concept with procedure

Informazioni sulla MSD

- 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
- Chiusura del n

20. Statistical processing

Descrizione del Concetto:
Descrizione in inglese del Concetto:
Linee guida per la compilazione:
Procedura:
Uso:
Non Editabile

20.1 Source data

Descrizione del Concetto:
Descrizione in inglese del Concetto:
Linee guida per la compilazione:
Procedura:
Uso:
Non Editabile

20.2 Frequency of data collection

Descrizione del Concetto:
Descrizione in inglese del Concetto:
Linee guida per la compilazione:
Procedura:
Uso:
Non Editabile

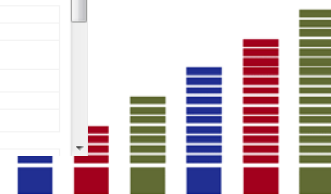
Gestione Quality Report - Dettaglio

Concept	Procedure
Statistical processing	Statistical processing
Source data	Source data
Frequency of data collection	Frequency of data collection

Gestione Quality Report - Lista Procedure

- Contact organisation unit: Restituisce il Servizio o i Servizi Istat a cui affersce il prodotto
- Contact person function: Restituisce profilo e incarico dei responsabili e dei referenti per il QR dei processi e a cui affersce il prodotto
- Contact phone number: Restituisce i telefoni dei responsabili e dei referenti per il QR dei processi e a cui affersce il prodotto
- Cost and burden: Restituisce gli indicatori sui costi
- Coverage - time: Restituisce da quando sono disponibili i dati
- Coverage control: Restituisce le azioni di controllo sulla lista dei processi e a cui affersce il prodotto
- Coverage error: Restituisce la lista e le azioni di controllo sulla lista dei processi e a cui affersce il prodotto e gli indicatori di inleggibilità
- Data collection: Restituisce le informazioni sulla fase di rilevazione
- Data collection control: Restituisce le azioni di controllo sulla raccolta
- Data collection mode: Restituisce le tecniche di raccolta
- Data compilation: Restituisce le operazioni di trattamento
- Data description: Restituisce la descrizione e i fenomeni osservati dai processi e a cui affersce il prodotto
- Data revision - policy: Restituisce la politica sulle revisioni dell'Istat per i prodotti per

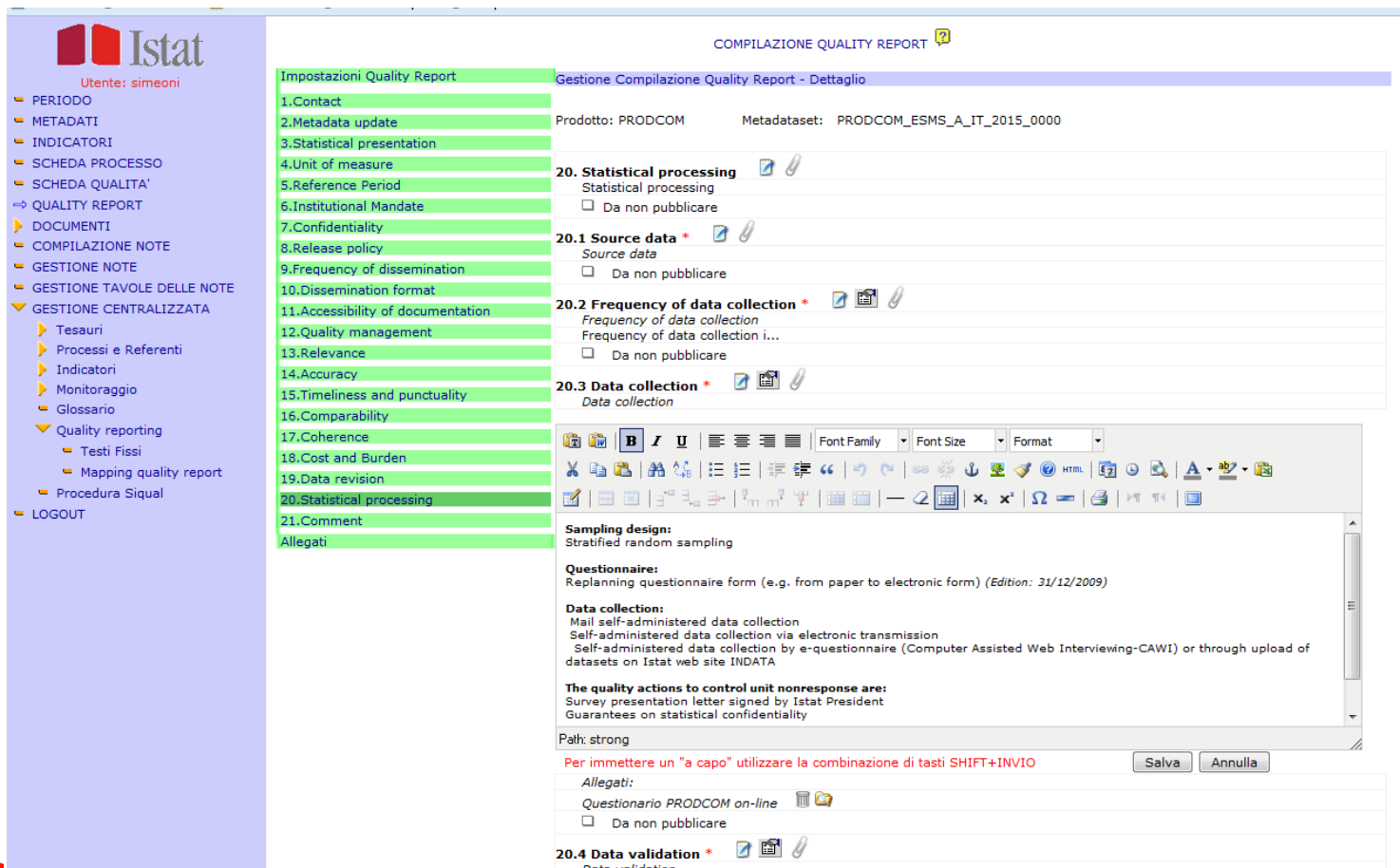
Salva Chiudi



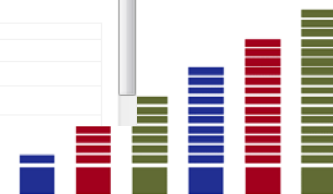
Istat work on national implementation

Example:

- Automatic precompilation and editor to complete



The screenshot shows the 'COMPILAZIONE QUALITY REPORT' web application. On the left is a navigation menu with the Istat logo and the user 'simeoni'. The menu includes sections like PERIODO, METADATI, INDICATORI, SCHEDA PROCESSO, SCHEDA QUALITA', QUALITY REPORT (selected), DOCUMENTI, COMPILAZIONE NOTE, GESTIONE NOTE, GESTIONE TAVOLE DELLE NOTE, and GESTIONE CENTRALIZZATA. The main area is titled 'COMPILAZIONE QUALITY REPORT' and shows a list of 21 items on the left, with '20. Statistical processing' selected. The right pane shows the details for '20. Statistical processing', including 'Statistical processing' and 'Da non pubblicare' options. Below this are sections for '20.1 Source data', '20.2 Frequency of data collection', and '20.3 Data collection'. A rich text editor is visible, containing text about 'Sampling design', 'Questionnaire', 'Data collection', and 'The quality actions to control unit nonresponse are:'. At the bottom, there are buttons for 'Salva' and 'Annulla', and a note about using 'SHIFT+INVIO' to insert a new line.



Exam

Istat

Utente: simeoni

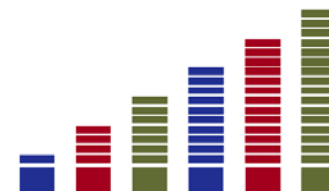
- PERIODO
- METADATI
- INDICATORI
- SCHEDA PROCESSO
- SCHEDA QUALITA'
- QUALITY REPORT
- DOCUMENTI
- COMPILAZIONE NOTE
- GESTIONE NOTE
- GESTIONE TAVOLE DELLE NOTE
- GESTIONE CENTRALIZZATA
 - Tesauri
 - Processi e Referenti
 - Indicatori
 - Monitoraggio
 - Glossario
 - Quality reporting
 - Testi Fissi
 - Mapping quality report
 - Procedura Sigal
- LOGOUT

ver 1.0.1

```
<?xml version="1.0" encoding="UTF-8"?>
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http://www.SDMX.org/resources/SDMXXML/schemas/v2_0/message SDMXMessage.xsd"
xmlns:generic="http://www.SDMX.org/resources/SDMXXML/schemas/v2_0/generic"
xmlns:compact="http://www.SDMX.org/resources/SDMXXML/schemas/v2_0/compact"
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xmlns:common="http://www.SDMX.org/resources/SDMXXML/schemas/v2_0/common"
xmlns:genericmetadata="http://www.SDMX.org/resources/SDMXXML/schemas/v2_0/genericmetadata"
xmlns:cross="http://www.SDMX.org/resources/SDMXXML/schemas/v2_0/cross" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.SDMX.org/resources/SDMXXML/schemas/v2_0/message">
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    <ID>PRODCOM_ESMS_A</ID>
    <Test>>false</Test>
    <Name>PRODCOM_ESMS_A_IT_2015_0000</Name>
    <Prepared>2016-05-06 11:33:46</Prepared>
    <Sender id="IT1"/>
    <DataSetID>PRODCOM_ESMS_A_123</DataSetID>
    <DataSetAction>Append</DataSetAction>
    <Extracted/>
    <ReportingBegin>2015-01-01T00:00:00</ReportingBegin>
    <ReportingEnd>2015-12-31T00:00:00</ReportingEnd>
  </Header>
  <genericmetadata:MetadataSet>
    <genericmetadata:MetadataStructureRef>ESMS_MSD</genericmetadata:MetadataStructureRef>
    <genericmetadata:MetadataStructureAgencyRef>ESTAT</genericmetadata:MetadataStructureAgencyRef>
    <genericmetadata:ReportRef>ESMS_REPORT_FULL</genericmetadata:ReportRef>
    <genericmetadata:AttributeValueSet>
      <genericmetadata:TargetRef>FULL_ESMS</genericmetadata:TargetRef>
      <genericmetadata:TargetValues>
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      </genericmetadata:TargetValues>
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        <genericmetadata:Value/>
        <genericmetadata:Annotations/>
      </genericmetadata:ReportedAttribute>
      <genericmetadata:ReportedAttribute conceptID="CONTACT_ORGANISATION">
        <genericmetadata:Value>Istat - Italian National Statistical Institute<br /></genericmetadata:Value>
        <genericmetadata:Annotations/>
      </genericmetadata:ReportedAttribute>
      <genericmetadata:ReportedAttribute conceptID="ORGANISATION_UNIT">
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        <genericmetadata:Annotations/>
      </genericmetadata:ReportedAttribute>
      <genericmetadata:ReportedAttribute conceptID="CONTACT_FUNC">
        <genericmetadata:Value>Process manager: Annarita Mancini - Senior Technologist Unit / Project Chief U.O. Statistiche sulla produzione ed i
```

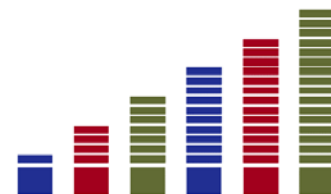
file:///C:/Users/simeoni/AppData/Local/Temp/PRODCOM_ESMS_A_IT_2015_0000.sdmx.xml#

STSCONS_ESMS11_A	
Convalidato - STSCONS_ESMS11_A_IT_2014_0000	
Retribuzioni, oneri sociali e costo del lavoro	
STSIND_ESMS21_A	
Convalidato - STSIND_ESMS21_A_IT_2013_0000	



Istat work on national implementation

- The passage from the ESS-MH to the SIDI/SIQual subsystem will be gradual and will be completed by the end of 2016
- Improvement of coordination and harmonisation of content
- Internal course on Quality reporting in the last quarter of 2016

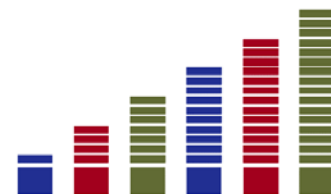


Design of national dissemination of standard quality reports

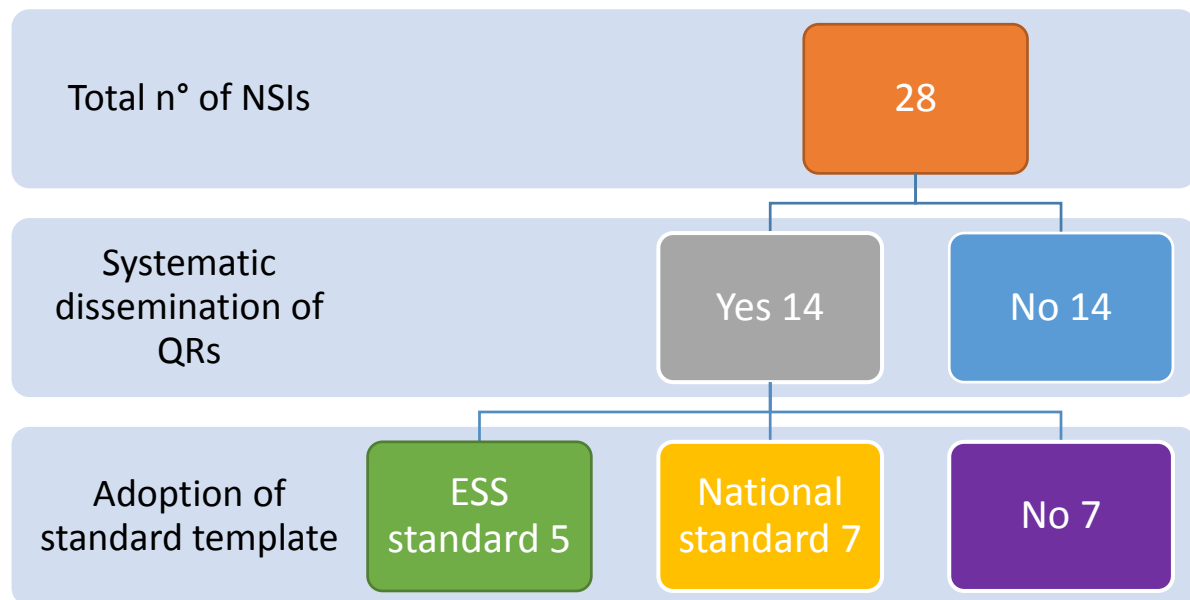
- Istat long tradition in collecting quality indicators but only a few are disseminated
- Improvement action endorsed by Istat in response to one of the recommendation of last round of ESS peer review consists in the dissemination at national level of ESS standard quality reports by the end of 2016



- Review of EU members NSIs' websites looking for quality reports
- Derived proposal for Istat dissemination of QRs



Design of national dissemination of standard quality reports

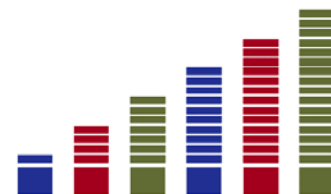


- Almost all in a dedicated section of the website
- 10 out of 14 organised by theme

methodological notes

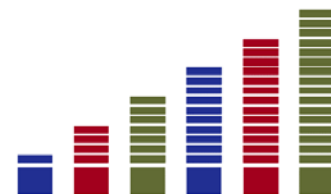
Other characteristics

- Usually only the most recent quality report is available
- Direct link from data is rare
- Format: mainly plain files



Design of national dissemination of standard quality reports

- ESS SQRs will be disseminated via SIDI/SIQual (all) and on the website (the most recent)
- Dedicated section
- Organisation by theme
- Navigable format



Design of national dissemination of standard quality reports

- Possible interface for dissemination via SIDI/SIQual

The screenshot displays the SIQual web interface, titled 'Information system on quality of statistical production processes'. The header includes the Istat logo and navigation links: Home, Glossary, Helped Search, Multidimensional search, Complete list, Report, and Documents. A secondary navigation bar offers 'Versione italiana', 'Comments', and 'FAQ'.

The main content area is titled 'Documents' and features a sidebar with links to 'General documents', 'Legislation', 'Questionnaires', 'ESS Standard Quality reports', 'Quality at a glance', and 'Thesaura'. The main panel, titled 'ESS Standard Quality Reports', contains an information icon and the text: 'In this page you can find the quality reports following the standards defined at European level'.

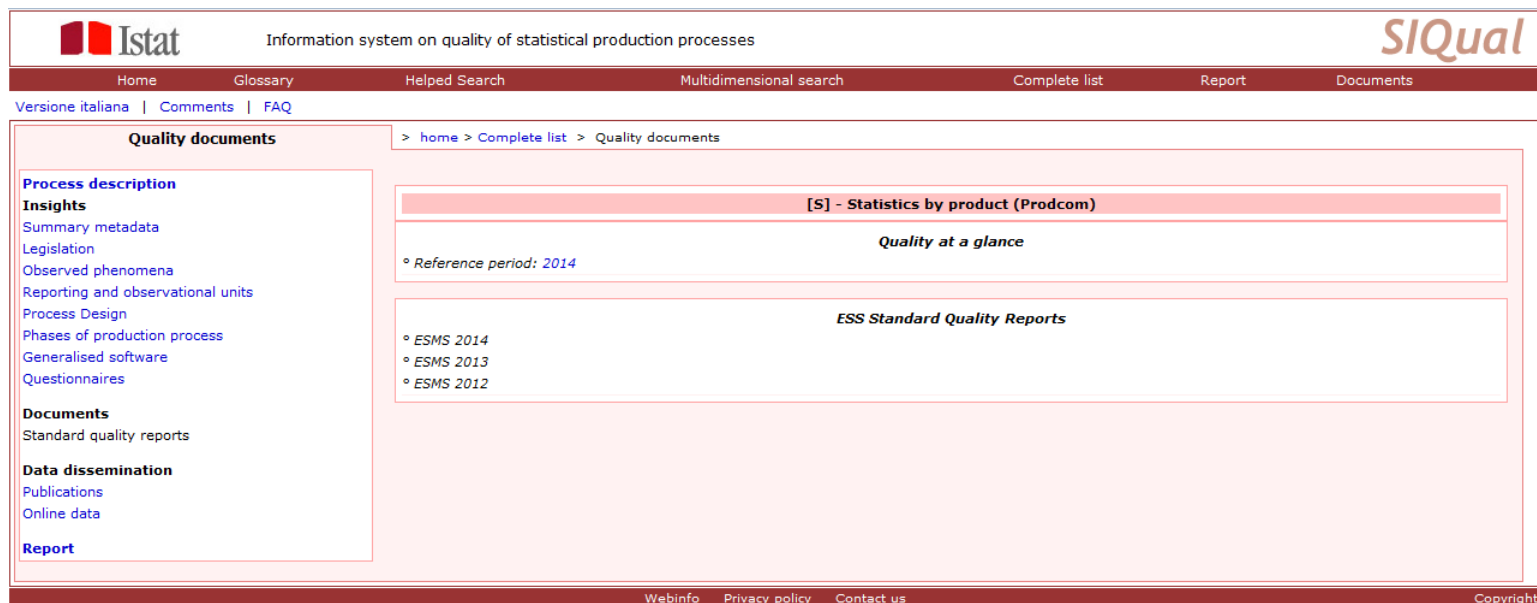
Below this, a section titled 'Reports by theme' lists various categories, each followed by a list of specific reports:

- Agriculture and zootechny
- Citizens' opinions
- Communication culture and leisure
- Education and training
- Enterprises
 - [S] - Statistics by product (Prodcom)
 - ESMS report - 2014
 - ESMS report - 2013
 - ESMS report - 2012
 - [S] - Community innovation survey
 - [S] - Yearly survey on structural characteristics of iron and steel industry
 - [S] - Survey on information and communication technology in enterprises
- Environment and energy
- External trade
- Health statistics
- Household economic conditions
- Industry and construction
- Justice and security
- Labour
- Population and households
- Prices
- Public Administrations
- Services
- Social participation
- Social security and welfare

The footer includes links for 'Webinfo', 'Privacy policy', and 'Contact us', along with a 'Copyright' notice.

Design of national dissemination of standard quality reports

- Possible interface for dissemination via SIDI/SIQual

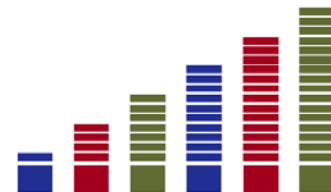


The screenshot shows the SIQual web interface, an information system on quality of statistical production processes. The header includes the Istat logo and navigation links: Home, Glossary, Helped Search, Multidimensional search, Complete list, Report, and Documents. A breadcrumb trail indicates the current location: home > Complete list > Quality documents.

The main content area is titled "Quality documents" and is divided into three sections:

- Process description**
 - Insights
 - Summary metadata
 - Legislation
 - Observed phenomena
 - Reporting and observational units
 - Process Design
 - Phases of production process
 - Generalised software
 - Questionnaires
 - Documents
 - Standard quality reports
 - Data dissemination
 - Publications
 - Online data
 - Report
- [S] - Statistics by product (Prodcom)**
 - Quality at a glance
 - Reference period: 2014
 - ESS Standard Quality Reports
 - ESMS 2014
 - ESMS 2013
 - ESMS 2012

The footer contains links for Webinfo, Privacy policy, and Contact us, along with a Copyright notice.



Design of national dissemination of standard quality reports

- Poss

Istat 90⁺

Search...

Products **Tools** **Information**

Glossaries and classifications Methods and IT tools On line systems Data quality

Territory Theme

In this section all the information necessary for understanding the methods and the correct interpretation of the survey results

[Home](#) / [Tools](#) / [Data quality](#) / Standard Quality Reports [Italiano]

Standard Quality Reports LISTEN

This section presents a standard quality report for each Istat survey.

In order to help the user in retrieving information, Istat surveys are grouped into thematic topics.

- ✚ Agriculture and zootechny
- ✚ Citizens' opinions
- ✚ Communication culture and leisure
- ✚ Education and training
- ✚ Enterprises
 - Community innovation survey
 - Statistics by product (Prodcom)
Quality at a Glance 2014
ESMS 2014
 - Yearly survey on structural characteristics of iron and steel industry
 - Survey on information and communication technology in enterprises
- ✚ Environment and energy
- ✚ External trade

Glossaries and classifications

- Migration to Ateco 2007
- A-Z Statistics

Methods and IT tools

- Design
- Design methods
- Design tools
- Collect
- Collection methods
- Collection tools
- Process
- Processing methods
- Processing tools
- Analyse
- Analysis methods
- Analysis tools

On line systems

Data quality ★

- Guidelines
- Standard Quality Reports
- SIQual
- Audit
- References

Highlights

- Press release calendar
- Earlier European GDP release
- ESA 2010: European system of national and regional accounts
- Economic forecasts and microsimulations
- Economic trends

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Design of national dissemination of standard quality reports

- Pos

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Search...

Products Tools Information

Glossaries and classifications Methods and IT tools On line systems Data quality

Territory Theme

In this section all the information necessary for understanding the methods and the correct interpretation of the survey results

Home / Tools / Data quality / Standard Quality Reports [Italiano]

Statistics by product (PRODCOM) [LISTEN](#)

- Contact
- Metadata update
- Statistical presentation
- Unit of measure
- Reference period
- Institutional mandate
- Confidentiality
- Release policy
- Frequency of dissemination
- Dissemination format
- Accessibility of dissemination
- Quality management
- Relevance

Glossaries and classifications

- Migration to Ateco 2007
- A-Z Statistics

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On line systems

Data quality

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