

How to fulfill all demands for quality reporting

Session 17: Quality reporting

June 2, 2016

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Different demands for metadata

...from different users

National

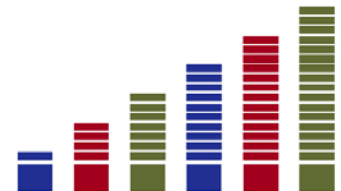
- Government/public officials
- Researcher/Academia
- Journalists/public
- Businesses
- Others

International

- EU
- IMF
- Others

Different metadata

- Quality reports
- Documentation of variables
- Concepts
- Classifications
- Other metadata



Metadata in Statistics Denmark

Dedicated work for an integrated metadata system since 2009

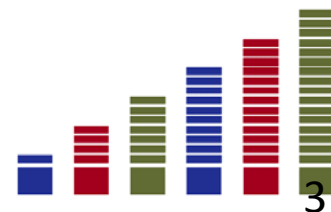
EU grant to implement Colectica and update quality reporting (completed in 2014)

Based on international standards

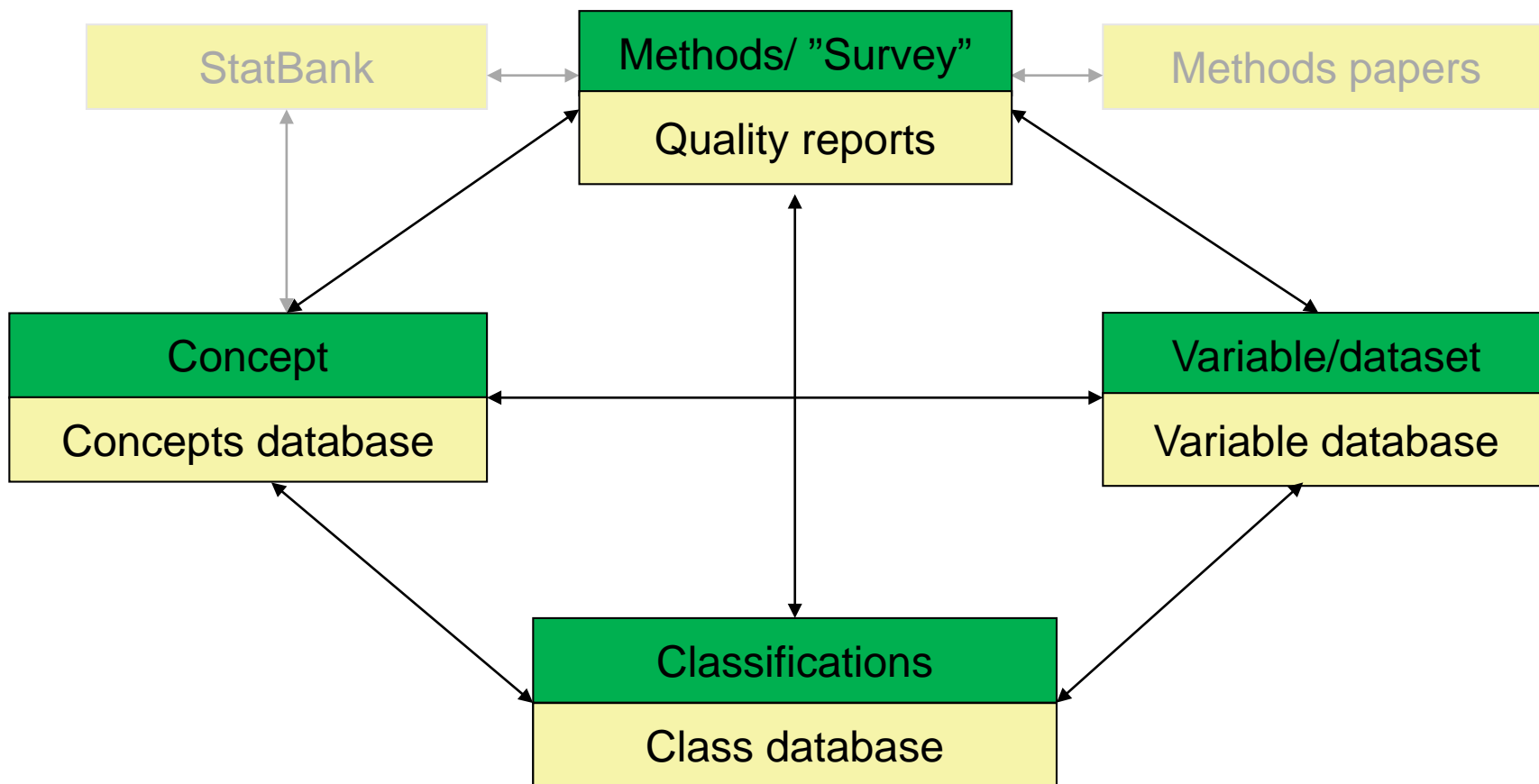
- Colectica is based on DDI (Data Documentation Initiative)
- Quality reporting is based on SIMS (Single Integrated Metadata Structure)

The idea is - in one product - to cover all users (national, international, EU)

Quality reports are prepared in Danish and English



Integration of metadata



Challenges on fulfilling user-needs

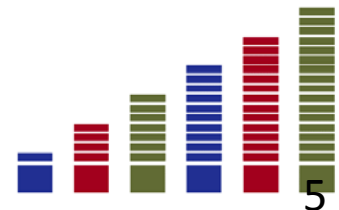
...in a cost-effective way

The work-processes and metadata

- Fragmented and non-standardised
- Metadata linked to final data and no reuse
- The presentation of metadata was fragmented and incomplete
- Concepts database was incomplete
- Classifications and code-lists were stored many places

Introduction of standards

- Generic statistical business Process Model (GSBPM)
- SIMS, SDMX (ESQRS and ESMS) from Eurostat
- DDI and DDI-tools to ensure integrated metadata



Integrating and harmonising

Once for all purposes reporting

- Each concept is only reported upon once and is re-usable

Integrated and consistent quality and metadata

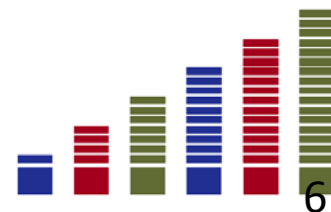
- Reporting framework where the reports are stored in the same database

A flexible and up to date system

- Where future extensions are possible by adding new concepts,

Single Integrated Metadata Structure” (SIMS)

- Inventory of ESS quality and metadata statistical concepts has been created
- SIMS integrates and streamlines the statistical concepts of the two ESS reporting structures (ESMS and ESQRS), by assuring that all concepts appear and are therefore reported upon only once

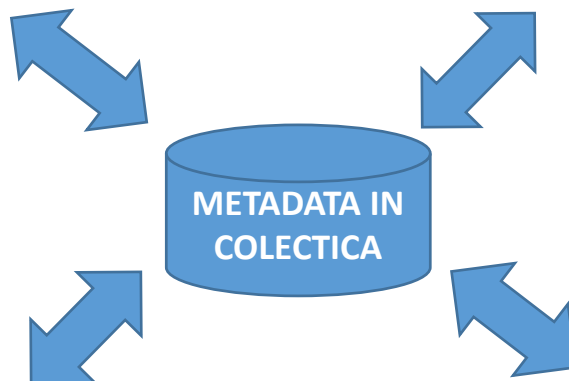


Enter SIMS fields

Country	Year	Field	Value	Field	Value
Denmark	2015	...	...	...	...
Denmark	2014	...	...	...	...
Denmark	2013	...	...	...	...
Denmark	2012	...	...	...	...
Denmark	2011	...	...	...	...
Denmark	2010	...	...	...	...
Denmark	2009
Denmark	2008
Denmark	2007
Denmark	2006
Denmark	2005
Denmark	2004
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Denmark	2002
Denmark	2001
Denmark	2000



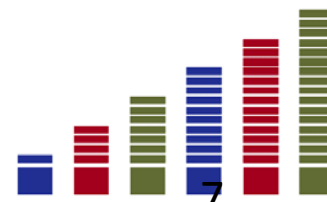
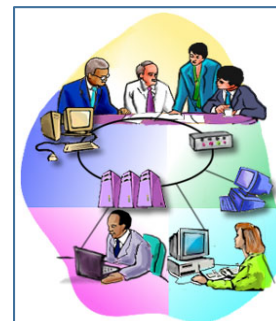
Publish at www.dst.dk



Send Quality report to EU

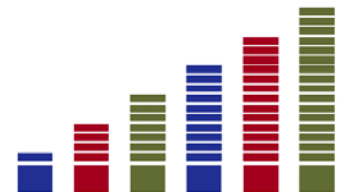
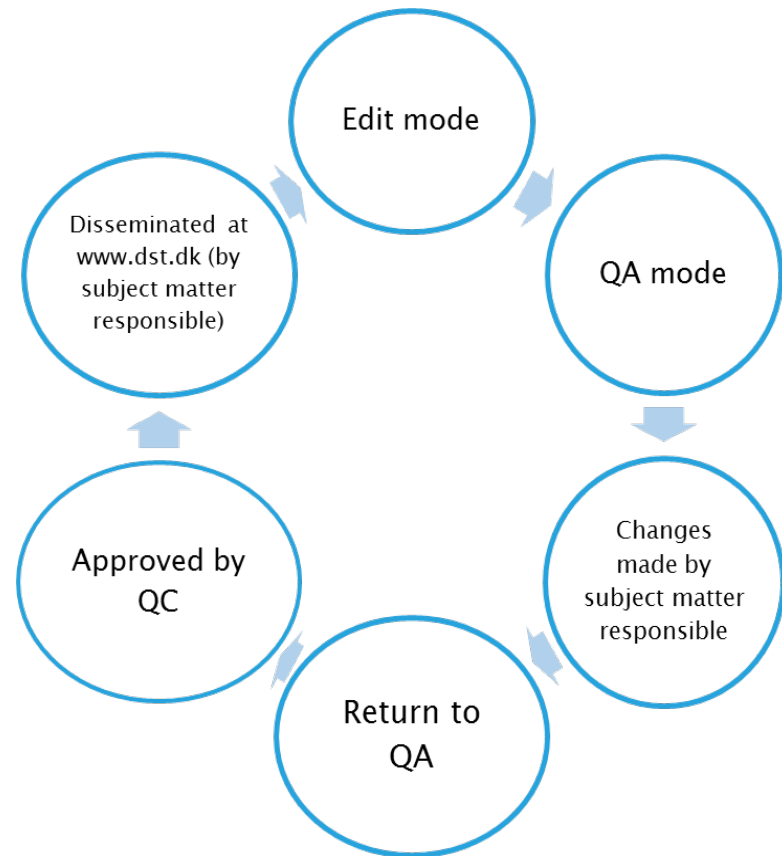


Publish at the Intranet



The process of quality reporting

Systematic quality assurance of content
Update with every new release of data
Archive with reports

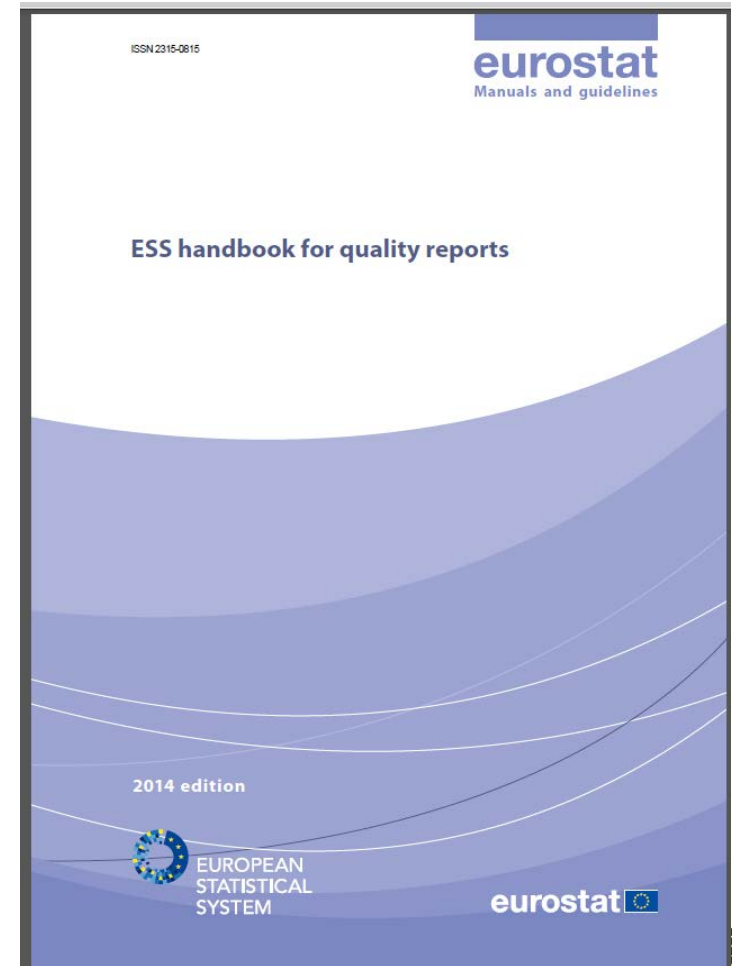


ESS handbook for quality reports

Contains SIMS in an annex

Guidelines for preparing detailed quality reports

Is used as basis for quality reporting in Statistics Denmark



ESMS, SIMS, ESQRS

Annex 1
Creation of the Single Integrated Metadata Structure
from the ESMS and ESQRS

ESMS	Single integrated Metadata Structure	ESQRS
1	1.0	1.0
1.1	1.1.0	1.1.0
1.2	1.2.0	1.2.0
1.3	1.3.0	1.3.0
1.4	1.4.0	1.4.0
1.5	1.5.0	1.5.0
1.6	1.6.0	1.6.0
1.7	1.7.0	1.7.0
1.8	1.8.0	1.8.0
1.9	1.9.0	1.9.0
1.10	1.10.0	1.10.0
1.11	1.11.0	1.11.0
1.12	1.12.0	1.12.0
1.13	1.13.0	1.13.0
1.14	1.14.0	1.14.0
1.15	1.15.0	1.15.0
1.16	1.16.0	1.16.0
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1.28	1.28.0	1.28.0
1.29	1.29.0	1.29.0
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1.31	1.31.0	1.31.0
1.32	1.32.0	1.32.0
1.33	1.33.0	1.33.0
1.34	1.34.0	1.34.0
1.35	1.35.0	1.35.0
1.36	1.36.0	1.36.0
1.37	1.37.0	1.37.0
1.38	1.38.0	1.38.0
1.39	1.39.0	1.39.0
1.40	1.40.0	1.40.0
1.41	1.41.0	1.41.0
1.42	1.42.0	1.42.0
1.43	1.43.0	1.43.0
1.44	1.44.0	1.44.0
1.45	1.45.0	1.45.0
1.46	1.46.0	1.46.0
1.47	1.47.0	1.47.0
1.48	1.48.0	1.48.0
1.49	1.49.0	1.49.0
1.50	1.50.0	1.50.0
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1.98	1.98.0	1.98.0
1.99	1.99.0	1.99.0
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3.89	3.89.0	3.89.0
3.90	3.90.0	3.90.0
3.91	3.91.0	3.91.0
3.92	3.92.0	3.92.0
3.93	3.93.0	3.93.0
3.94	3.94.0	3.94.0
3.95	3.95.0	3.95.0
3.96	3.96.0	3.96.0
3.97	3.97.0	3.97.0

Outputs from Colectica in SD

Dissemination – www.dst.dk

- Does not contain all SIMS fields. Two layers. The first layer is the “front page fields” with an overview e.g. Statistical processing. The second layer is more details e.g. Source data and data validation.

SIMS

- Contains all SIMS fields

GSBPM

- Contains all SIMS fields, but is arranged according to GSBPM. E.g. Relevance will be found in the needs phase and Accuracy and reliability will be found in the Analysis phase.

ESMS

- Contains all ESMS fields

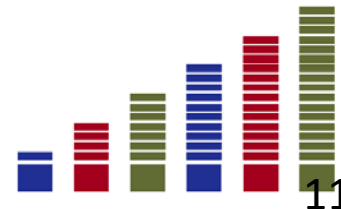
ESQRS

- Contains all ESQRS fields

MIP

- Gives the SIMS fields that are in the MIP quality template. The institutional fields in the template are prefilled.

All reports can be opened in Word or Excel



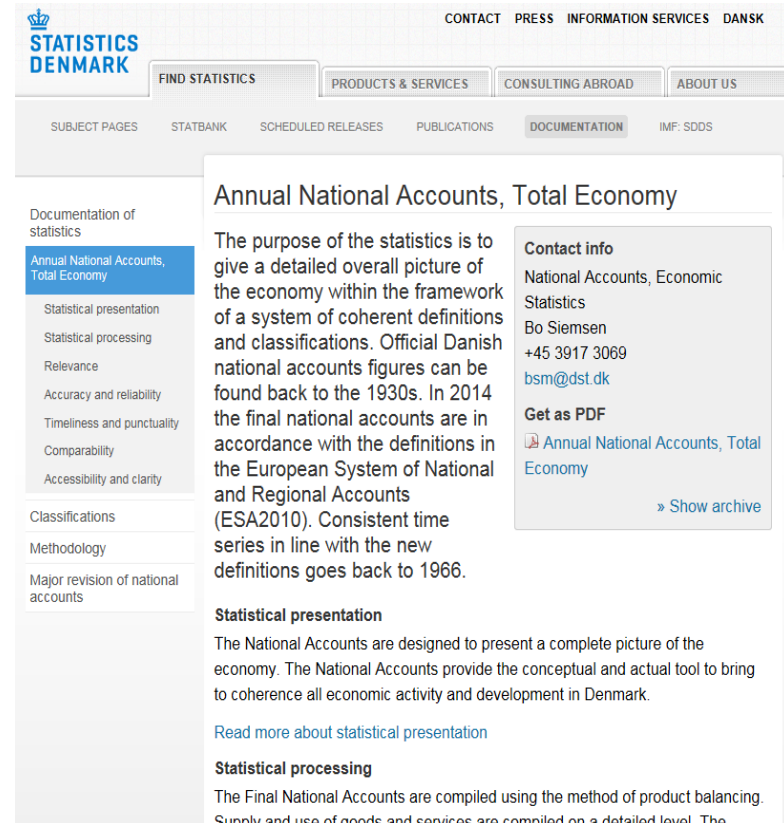
Quality report on www.dst.dk

Documentation of statistics

User oriented SIMS fields

Two layers:

- “Front page fields” give overview
- More details in second layer



The screenshot shows the Statistics Denmark website interface. The main content area is titled "Annual National Accounts, Total Economy". The page includes a navigation menu at the top with options like "CONTACT", "PRESS", "INFORMATION SERVICES", and "DANSK". Below the navigation, there are several tabs: "FIND STATISTICS", "PRODUCTS & SERVICES", "CONSULTING ABROAD", and "ABOUT US". The "DOCUMENTATION" tab is selected, showing a list of documentation topics on the left sidebar, including "Annual National Accounts, Total Economy", "Statistical presentation", "Statistical processing", "Relevance", "Accuracy and reliability", "Timeliness and punctuality", "Comparability", and "Accessibility and clarity". The main content area contains a detailed description of the statistics, a "Contact info" box with contact details for Bo Siemsen, and sections for "Statistical presentation" and "Statistical processing".

Annual National Accounts, Total Economy

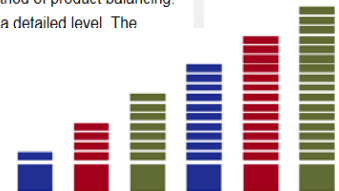
The purpose of the statistics is to give a detailed overall picture of the economy within the framework of a system of coherent definitions and classifications. Official Danish national accounts figures can be found back to the 1930s. In 2014 the final national accounts are in accordance with the definitions in the European System of National and Regional Accounts (ESA2010). Consistent time series in line with the new definitions goes back to 1966.

Contact info
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+45 3917 3069
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Get as PDF
[Annual National Accounts, Total Economy](#)
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Statistical presentation
The National Accounts are designed to present a complete picture of the economy. The National Accounts provide the conceptual and actual tool to bring to coherence all economic activity and development in Denmark.
[Read more about statistical presentation](#)

Statistical processing
The Final National Accounts are compiled using the method of product balancing. Supply and use of goods and services are compiled on a detailed level. The

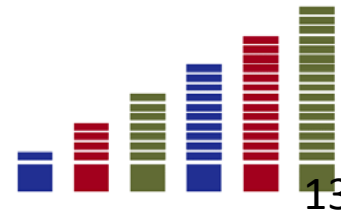


Reporting to Eurostat

Automatic transfer of metadata to ESS metadata handler.

The screenshot displays the 'ESS METADATA HANDLER' web interface. At the top, there is a navigation bar with the European Commission logo and the text 'European Commission'. Below this, a breadcrumb trail reads 'European Commission > Eurostat > ESS-MH'. A menu bar contains 'Metadata', 'Concatenation', 'Reports', and 'Administration'. The main content area shows a filter configuration section with the following details:

- Filters: (Dom.: HICP - Mdf.: HICP_ESMS_A - City.: FR) ?
- Stored filters: (none)
- Filtering options:
 - Domain: HICP
 - Metodata Flow: HICP_ESMS_A



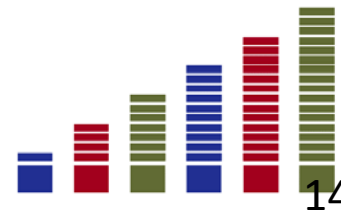
Reports for NA to EU

In connection with MIP

- Inventory
- Quality report

National and regional accounts

- Prefilled by Eurostat
- Comments by member states



Inventory template - MIP

Follows SIMS – to some extent

New details e.g.

- S21.1
- S21.2
- S21.3
- Etc.

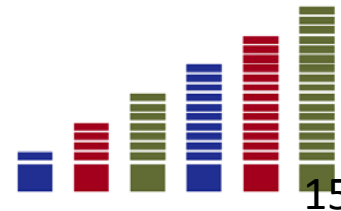
Eurostat draft 31 March 2015

Inventory template

Grant supporting quality measures for statistics used in
the context of the MIP

For further information on some of the sub-concepts (e.g. distinction between the different types of statistical process) please refer to the [Technical Manual of SIMS](#), the [ESS Handbook for Quality Reports](#) and [GSBPM v5.0](#).


Nr. according to SIMS 1.0	Concept code	Concept Code	Descriptions
S.1	Contact	CONTACT	Individual or organisational contact points for the data or metadata, including information on how to reach the contact points.
S.1.1	Contact organisation	CONTACT_ORGANISATION	The name of the organisation of the contact points for the data or metadata. <i>The full name of your organisation.</i>
S.1.2	Contact organisation unit	ORGANISATION_UNIT	An addressable subdivision of an organisation. <i>The name of the unit or division responsible for the metadata file (it can also include a unit number).</i>
S.1.3	Contact name	CONTACT_NAME	The name of the contact points for the data or metadata. <i>The name of the person responsible for the statistical domain (first name and family name), one person only.</i>



Generic template for national reports on quality MIP

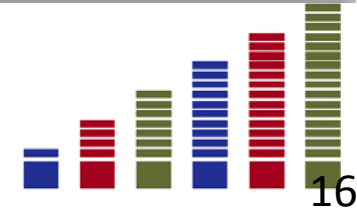
Mapped to SIMS
and IMF DQAF

Made in
cooperation with
central banks



Generic Template for National Reports on Quality
Balance of payments and international investment position statistics
 12 December 2014
 Reporting institution:

Selected principles					Some specific examples for indicators and related questions (Response options, unless indicated otherwise: not implemented; partially implemented; fully implemented)	Statistical domain specifications
European Code of Practice principles	Public Commitment on European Statistics by the ESCB	Selected elements				
Institutional Environment	Institutional Environment	CoP/PC	IMF DQAF	SIMS	Question(s)	B.O.P./IIP, statistics
CoP1 Professional Independence	PC1 Professional Independence	1.1/1.1	1.1 1.3		The independence of [name of reporting institution] from political and other external interference in developing, producing and disseminating official statistics is guaranteed by law. <i>Please confirm this element by referring to the relevant national and EU legal act(s) and the formulation used in the legal act.</i>	As the ESCB is established by primary law, a reference to Article 130 of the EU Treaty and Article 7 of the Statute of the ESCB and of the ECB should be sufficient to reassure the ECB and the national central banks act independently when exercising its statistical activity. Regulation (EC) 223/2009 article 2 would be the relevant reference for ESS.
		1.4/1.5	1.2		The [name of reporting institution] has an annual statistical work programme which is made public. <i>Please confirm these elements and specify where to find the work programme or similar document, if made available.</i>	

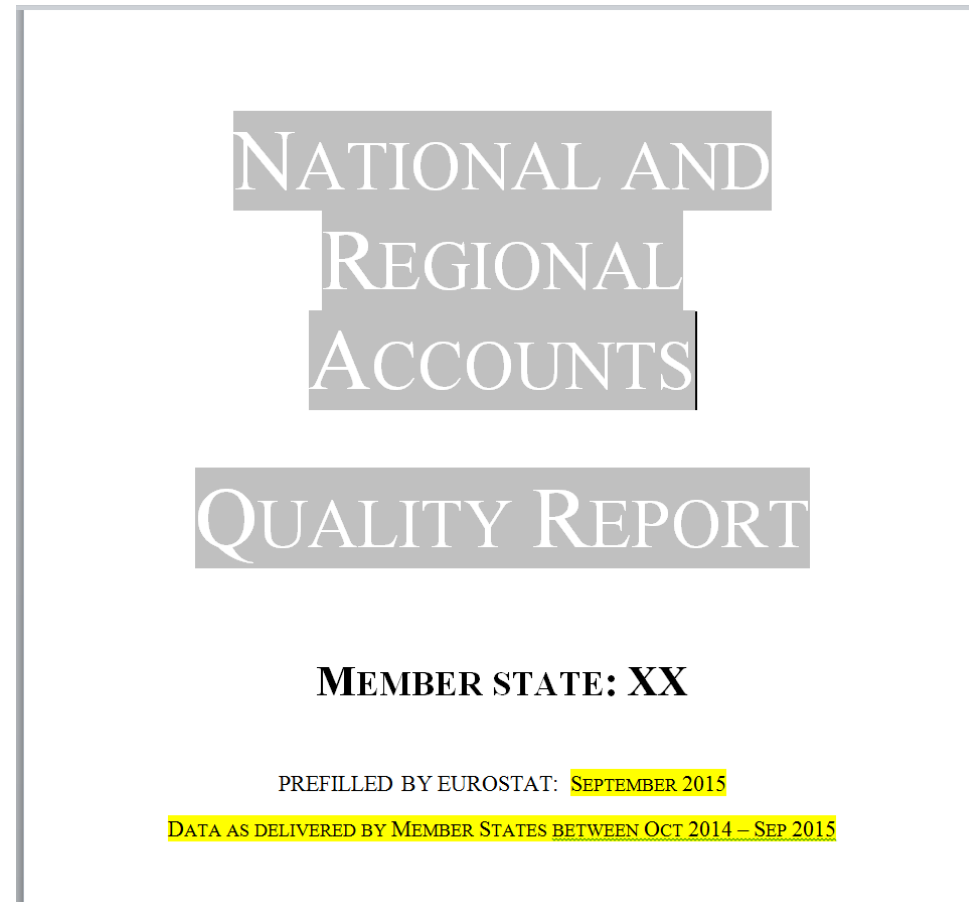


Quality report on NA and RA

Follows to some extent SIMS

Common report for:

- Annual NA
- Quarterly NA
- Government finance statistics
- Non-financial sector accounts
- Supply-use, Input-output
- Regional accounts



Challenges

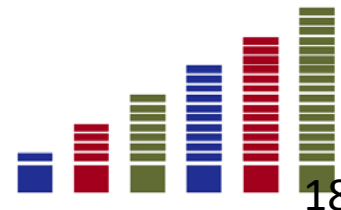
Comments connected to single figures

- E.g. how many revisions made – is perhaps not something that will be submitted in S20.1 or S20.2 with an explanation because these fields ask for revision policy and revision practice.

Comments for many areas at the same time

In Colectica there is one Quality report for each of the areas:

- Annual NA
- Quarterly NA
- Government finance statistics
- Etc.





Thank you for your attention!

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