



Session 8: Data quality assurance and dissemination

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Data quality

- The measurement of quality of any statistics is concerned with providing the user with sufficient information to judge if data have adequate ‘quality’ for their intended use

E.g. conceptual framework and definitions, data accuracy, etc.



Data quality framework

- A DQF integrates quality dimensions into an organized structure
- Currently there is not one internationally agreed framework, but the existing frameworks (e.g. IMF, OECD, Eurostat) have a lot in common
- Some countries have also developed their DQFs



Importance of DQFs

- Assessment quality in a systematic and transparent manner
- Guide countries' efforts for strengthening their statistical system (e.g. identifying data gaps)
- Targeting technical assistance
- Assessment by other groups of data users



Examples of dimensions of quality

- Prerequisite of quality
- Relevance
- Credibility
- Accuracy
- Timeliness
- Methodological soundness
- Coherence
- Accessibility



Quality indicators

- Indicators can be used to give an indication of particular aspects of data quality
- In other statistical domains, minimum set of indicator is suggested for use (e.g., timeliness-time lag btw release date and end of reference period)



Metadata

- Metadata provide information on the statistical data
- Example of components of metadata for disseminated statistics:
 - Data coverage, periodicity and timeliness
 - Access by the public
 - Integrity of disseminated data
 - Data quality
 - Summary methodology
 - Dissemination format



Dissemination

Data dissemination consists of distribution or transmission of statistical data to users (e.g. policy makers, business community, other users)

Statistical authorities collect data under a legal authority from national statistical acts/regulations => their dissemination strategy should meet the legal requirements

Three guiding principles: confidentiality, equality and objectivity



Confidentiality

Data provided by a statistical unit is considered confidential and should not be used for any other than the statistical purpose

Disseminated data are considered confidential when they allow reporting units to be identified (directly or indirectly) and thus disclosing their information

There are different criteria for handling confidentiality (e.g. suppression, aggregation)



Equality

Statistics compiled by a statistical authority are collective goods => no users are privileged and every citizen can take note of the data under equal terms

No new data are supplied to anyone before these are officially released

An advance release calendar should be developed and announced



Equality (2)

Timeliness of release of annual and infra-annual statistics varies among countries

In industrial statistics, for example, countries are encouraged to release:

- their initial monthly data 45 days after the end of the reference month
- quarterly data, 3 months after the end of the quarter
- annual data 18 months after the end of the year



Objectivity

Released data should not be accompanied by judgments or recommendations (independence of the statistical authority)



Points for discussion

- What are the element of data quality assurance of energy statistics in your countries?
- Can a minimum set of ‘quality’ indicators for energy statistics be developed and recommended?
- Can components for metadata in energy statistics be developed and recommended?
- What are the practices in data dissemination?
- How is confidentiality handled in energy statistics?
- Are there guidelines in the timeliness of release of energy statistics?



**Thank you very much
for your attention!**