

Module 4: Issues in Assuring Quality of SBRs

Concepts in quality and quality
assurance

What is quality

“The degree to which a set of inherent characteristics fulfils requirements.

Quality is a multi-faceted concept. The dimensions of quality depend on user perspectives, needs and priorities, which vary across users.”

(UNSD, National Quality Assurance Frameworks Glossary)

Data Quality Framework

- UNSD – National Quality Assurance Frameworks
- ABS, Data Quality Framework, May 2009
- Eurostat, Handbook on Data Quality Assessment Methods and Tools
- OECD, Quality Framework for OECD Statistics, 2003

Data quality framework

A data quality framework helps users to:

- decide whether a dataset or statistical product is fit for purpose (which in turn helps to identify data gaps);
- assess the data quality of seemingly similar collections; and
- interpret data.

It can also assist those developing statistical collections to produce high quality outputs.

Source: ABS Data quality Framework (cat.no.1520.0)

Dimensions of quality

Australia	Eurostat	OECD	South Africa	Canada
Relevance	Relevance	Relevance	Relevance	Relevance
Timeliness	Timeliness / punctuality	Timeliness	Timeliness	Timeliness
Accuracy	Accuracy	Accuracy	Accuracy	Accuracy
Coherence	Coherence	Coherence	Coherence and comparability	Coherence
Interpretability		Interpretability	Interpretability	Interpretability
Accessibility	Accessibility / clarity	Accessibility	Accessibility	Accessibility
<u>Intitutional Environ't</u>	Comparability	Credibility	Methodological soundness	
			Integrity	

Key points

- There are likely to be trade-offs between the quality dimensions.
- The dimensions need to be measurable.
- Quality dimensions apply to SBRs.
 - The key quality dimensions should be assessed internally to ensure the overall SBR meets quality expectations.
 - The Quality of the SBR will impact on the quality of economic outputs.
 - Impacts may not emerge until further along in the statistical cycle.

ABS Quality Assessment

Ongoing Quality in SBRs

- Ongoing quality assurance in SBRs is critical.
- During SBR development, key quality assurance checks should be in-built. These should include:
 - Quality of the stock
 - Quality of the flows
- Need a process of ongoing review of quality assurance checks
- Need good metadata

Quality in SBRs

- Keep uses of SBR in mind
- Quality has macro and micro dimensions
 - Make sure focussing on big picture
 - Make sure significant unit record events are reviewed
 - Need processes to ensure clerical work
- Automate quality assurance checks / audits as far as possible
 - Where there are automated processes, audits may highlight systems issues, admin data issues
 - Where there are clerical processes, audits may highlight training needs, or opportunities to improve procedures or documentation
- If a quality incident is observed, know what the internal process to resolve is.

Quality in SBRs

SBR quality assessment

- Phases – input, processing and outputs
- External information
- Internal consistency
- Temporal consistency
- Time lags

Resources

- <http://unstats.un.org/unsd/dnss/QualityNQAF/nqaf.aspx>
 - Includes links to country resources
- ABS Data quality Framework, May 2009 (cat.no.1520.0)
- ABS Data Quality On-Line (see NSS website)
- International Guidelines on Statistical Business Registers (to be released in 2015)

Discussion points

- Experience of countries with Quality Frameworks
- SBR Quality issues faced by your country?
- Do you agree with the key dimensions?
- What trade-offs in quality can you envisage from an SBR perspective?
- How important is it to provide material on quality of SBRs to internal users and the public?