**Data Quality**

All data and derived products must have associated with them a Quality Indicator (QI) based on documented quantitative assessment of its traceability to community agreed reference standards. This requires all steps in the data and product delivery chain (collection, archiving, processing and dissemination) to be documented with evidence of their traceability. Traceability: property of a measurement result relating the result to a stated metrological reference through an unbroken chain of calibrations of a measuring system or comparisons, each contributing to the stated measurement uncertainty (ISO guide 99:2007).

**Operational framework: Principles and scope**

This framework, in the context of data and derived products, is dependent on the successful implementation of two principles:

- Accessibility / availability
- Suitability / reliability

And the means to efficiently communicate these attributes to all stakeholders.

- Certification: makes a CEOS-wide endorsement of “best practices” possible
- Standards: requires all steps in the data and product delivery chain (collection, archiving, processing and dissemination) to be documented with evidence of their traceability. Traceability: property of a measurement result relating the result to a stated metrological reference through an unbroken chain of calibrations of a measuring system or comparisons, each contributing to the stated measurement uncertainty (ISO guide 99:2007).

**Operational framework: Structure**

To enable these principles to be implemented in a harmonised manner, the Committee on Earth Observation Satellites (CEOS), the space arm of GEOSS, following discussion at two international workshops of Cal/Val experts, has established a quality assurance (QA) framework.

This framework consists of a set of operational guidelines derived from “best practices” for implementation by the community.

- Principles and scope
- Data Quality
- Data Policy
- Communication & Education

Each theme has an overarching “guiding principle” towards achieving interoperability with a minimal set of “key guidelines” to aid harmonisation.

**Summary & Status**

- The key guidelines are currently being finalised following discussion at the Washington Workshop in May 08.
- The guidelines will be presented for endorsement to CEOS, to address GEO task DA-06-02, in November 08 and subsequently recommended for use throughout the GEO community.
- An implementation strategy to encourage worldwide use and (if required) potential evolution to meet any additional specific needs of data providers, for example those related to in situ measurements, is now under development.

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