Minutes for the IODP-MI QAQC Taskforce

6-7 November, 2006 IODP-MI, Washington, DC with ESO comments

Members Present

- Kelly Kryc (IODP-MI)
- Philippe Gaillot (CDEX)
- David Houpt (IODP-USIO)
- Clive Neal (STP, Univ. of Notre Dame)

QAQC Taskforce Terms of Reference

The QAQC Taskforce established terms of reference for the taskforce (document attached).

Goals of the Taskforce

Define the Integrated Ocean Drilling Program QA/QC vision statement:

"The IODP QA/QC Taskforce seeks to establish policies to ensure that the highest quality data possible are produced on all IODP platforms and associated shorebased facilities. These policies will define guidelines for traceability of measurements, documenting procedures, recording results, and determining uncertainty for all data generated by IODP."

Provide a QA/QC framework that takes us beyond ODP

See above and Terms of Reference.

Definition of QA/QC in the context of IODP

Define concepts and terminology.

The QAQC Taskforce has endorsed the use of a glossary of IODP QA/QC terminology. A draft document has been generated and will be submitted for comment.

Consensus Statement: While it will be helpful if all the IOs use the same terms for QA/QC, it is not absolutely necessary as long as the terms are clearly defined.

Formulate minimum requirements that each IO and IODP-MI must meet in order to have a successful quality program.

The requirements for a successful QA/QC program are covered in the QAQC Taskforce vision statement.

Highlight areas/disciplines that have a common QA/QC framework (e.g., geochemistry, physical properties, downhole measurements, visual core description) and develop a broad *outline* QA/QC protocol to be reviewed by experts/SAS after the meeting.

The broad QA/QC framework was defined in the QAQC Taskforce vision statement, but there are a few issues that should be highlighted:

- Each discipline's representatives should define the broad calibration and reporting requirements for different laboratories. This should include the types of standards/reference materials, but not exactly what standards/reference materials (this is an implementation issue for each IO).
- The standardization and calibration policies of each IO should be reviewed by the QAQC Taskforce to ensure that calibration/reference material analyses are sufficient to monitor precision and drift.

Establish strategies and mechanisms for resolving conflicts between quality assurance and operational imperatives.

Nonstandard Methods Policy

Nonstandard methods for gathering data and making measurements require the generation of a "technical note" which explains the nonstandard method and its specific QA/QC protocol. The data generated by this method must be flagged as "nonstandard." Justification for using such a protocol must be approved prior to sailing by the Co-chief scientists, staff scientist and the IO, or, in unusual circumstances, may be approved by the Co-chief scientists, staff scientist, and IO during an expedition (*please be aware that the IOs must be consulted as there may be health and safety issues and or cost implications*). The technical note must include full QA/QC procedures for traceability and uncertainty estimation and, where feasible, the measurement should also be made in parallel with the standard method.

Third Party Analytical Tools

Consensus Statement: The QAQC Taskforce feels that there is a need for expansion and clarification of the IODP Third Party Tools policy to specifically encompass the requirements for QA/QC and to include the CWG recommendations from the Boston SciMP Meeting.

Proficiency of IODP Staff

Consensus Statement: The QAQC Taskforce feels that there is a need for a policy statement for the competence/proficiency of technical staff. (Reference: CWG recommendations from the Boston SciMP Meeting.)

Consensus Statement: While the QAQC Taskforce understands that new technicians will need to be deployed to the platforms from time to time, it wishes to stress that the <u>entire</u> technical staff cannot be inexperienced and that there is an expectation that the majority of the technical staff be fully qualified in shipboard procedures and protocols.

Data Violating QC Parameters

Consensus Statement: The QAQC Taskforce identifies the need to automatically flag data which violates the QC parameters of a given measurement in the database and that appropriate corrective action can be taken.

Consequently, the IOs must establish a general policy for flagging data which falls outside of a QC parameter.

Identify priorities

Establish/define communication pathways between IOs and between the IOs and IODP-MI.

Consensus Statement: Communication between the IOs and IODP-MI on quality issues is vital for the success of the quality program.

IODP-MI has informed the taskforce that the IOs are currently formulating an agreement for the establishment and maintenance of communication pathways. Communication protocols must also be established for the integration of QAQC Taskforce work with other IODP taskforces and working groups.

Establish strategy for complex drilling programs (e.g., NanTroSEIZE).

Consensus Statement: The QAQC Taskforce sees the NanTroSEIZE project as a driving force for inter-IO coordination of QA/QC protocols.

The taskforce will request information from the NanTroSEIZE PMT and Specialty Coordinators (see action item below).

Develop the path forward

- Highlight the resources required by the taskforce and by the IOs to accomplish the mandate TABLED.
- Formulate a timeline for implementation TABLED, but prior to operations.
- Define the action items to accomplish before the next meeting (see below)
- Identify next meeting date: Feb 12-13th, 2007.

Deliverables

The following items are deliverables for the QAQC Taskforce members and/or the IOs.

QAQC Taskforce Roadmap

The taskforce roadmap is a work in progress because the IOs must better define the current state of QA/QC development within their organizations. This item is tabled for now.

Management Buy-In

Consensus Statement: The QAQC Taskforce feels that a need exists for top-down management buy-in for QA/QC. This is in part because a QA/QC programs have a cost in time, manpower, and money.

Raw Data

Consensus Statement: The QAQC Taskforce agrees that raw data should be saved along with processed data wherever possible and practical.

Action Items

Priority Action Item: The IODP-MI recommends that the QAQC Taskforce review QA/QC procedures implemented by the IOs annually.

Recommendation/IO Action Item: The QA/QC taskforce requests that the IOs provide their plans and measurement-specific protocols for implementing QA/QC for the IODP Minimum and Standard Measurements by February 2, 2007. Those protocols that are not ready by the deadline can be provided to the taskforce at a later date, which must be specified by the IO.

IO Action Item: The QA/QC taskforce requests that each IO suggest a method by which they would implement cross-platform comparisons of data to be submitted on February 2, 2007.

Action Item: Revised terms of reference, glossary, and list of experts will be circulated to IOs, IODP-MI, and STP for review.

Action Item: Establish a general policy for flagging questionable data.

Action Item: The ability to compare and contrast data from different platforms is crucial and requires that QA/QC personnel be granted access to moratorium data across IOs solely for the purpose of QAQC. Therefore the QA/QC taskforce requests that this issue be considered and resolved by IODP-MI and IO management.

Action Item: Request from NanTroSEIZE PMT (and Specialty Coordinators) information regarding QA/QC for this multi-platform project.