

## IOOS Program Office Responses to Data Management Questions

IOOS Fall Meeting, November 7-8, 2013

**1)** What is the overall vision, from the US IOOS Program Office perspective, for the DMAC Enterprise and how does this influence the RA data management role and related IOOS/RA interactions? Metadata, QARTOD, and systems integration testing are all elements that can help shape a robust quality management system, but these processes seems disconnected to the certification process.

Firstly, the overall vision of DMAC from the IOOS Program Office perspective is to continue the extremely productive relationship between IOOS Regions and the IOOS Program Office in developing efficient and innovative ways to efficiently disseminate IOOS information. Certification represents the minimum standards necessary for integration of RICEs into the System, and as a result the DMAC guidelines in the rule are not meant to be overly prescriptive nor are they meant to encompass the entire vision of DMAC. Other guidance, such as from the NOAA Environmental Data Management Committee (EDMC) and from the IOOS Program Office, is meant to build upon the certification guidelines and may include additional topics such as metadata standards and systems integration testing.

**2)** What is the role of specialized data portals (e.g. HFR, glider, animal telemetry) and the regional data portals? What does the US IOOS Program Office see as the appropriate role is for the RA DMAC teams and what is appropriate at the IOOS level?

This question is beyond the scope of DMAC/certification. However, additional discussion on this topic would be useful so that both IOOS Regions and the IOOS Program Office have a unified vision of the role of national data portals going forward.

**3)** Is the following a correct interpretation of what is required for all data distributed by an RA subject to QC requirements? Data should use 1) metadata to document QC done by the data provider "upstream";

It is good practice to use metadata to document QC done "upstream," and is encouraged by the Program Office, however there is no requirement to do so to be certified. To be certified, a RICE must only describe these upstream procedures in their DMAC plan.

2) follow QARTOD for parameters that apply

Yes, the RICE must follow approved QARTOD procedures

3) RA conducts some QC according to some other relevant standard. If metadata is required, is there a need for #3?

For variables without documented QARTOD procedures, the QC procedures are subject to the judgement of the RICE, but QC of some type must be performed.

4) Is there a difference between what is needed for federal indemnification and is needed to certify RICEs for purposes of “integration into the System?”

Federal indemnification only applies to those RICEs that have been certified. Certification is the formal process for integration into the System.

**Final Clarification:**

The RICE doesn't have to perform QC themselves, however QC must be performed on all data. The QC can be performed by the RICE or by an upstream data provider.

For certification, the RICE must submit a DMAC plan that describes or references the QC procedures for all data streams, including those performed upstream. While it is good practice to document the QC in the metadata associated with the data sets, the only requirement for certification is to describe these procedures in the DMAC plan.