General Remarks

The First Session of the “IODE/JCOMM Forum on Oceanographic Data Management and Exchange Standards” will commence at 0900 on 21 January at the IODE Project Office in Oostende, Belgium. The objective of the Forum is to achieve broad agreement and commitment to adopt a small number of standards related to ocean data management and exchange. The meeting will bring together representatives of organizations who are involved in ocean data management, have strong technical expertise in one or more areas and are able to influence their national organizations to adopt the agreed upon standards.

Factors influencing the organization of the meeting include:

- This is expected to be the starting point for a developing standards setting process. We should not be overly ambitious in objectives for this meeting since it is important to show success.
- The agenda addresses 20 topics for which agreement should be possible but probably not all 20 will be completed during the first meeting;
- Key people from programmes and institutions with technical knowledge of the subject areas have been invited in order to manage the meeting size. The conclusions and recommendations of the meeting(s) will need to be communicated to the wider ocean data management community after the meeting to seek their agreement.

Expected outcomes from the meeting include:

(i) agreement on standards for selected topics;
(ii) plan of action to publish the standards through appropriate channels (e.g. ISO, best practices,…)
(iii) a set of topics for which agreement can be reached with a little more discussion (either inter-sessionally or during the next meeting).
(iv) agreement on how to continue the standards setting process (including the selection of other topics, national implementations, wider community involvement, role of a steering committee, etc.).
(v) assess the effectiveness of this meeting.
(vi) agree on procedure for topics on which no agreement was reached;
(vii) agree on priority items that might be discussed at the next meeting;

The participants at the meeting are a selected subset of the wider community. The wider community will need to be included in the standards setting process because adherence to the standards is voluntary and to be effective, we need broad community acceptance. It is for this reason that the meeting will be discussing the mechanisms to engage the wider community as a priority and follow on activities to continue the standards setting process.
The Chair of the meeting, Mr Bob Keeley (Chair, JCOMM Data Management Coordination Group), will manage the overall conduct of the meeting, assisted by Mr Greg Reed (IODE Co-Chair) and Mr. Peter Pissierssens (IODE Programme Coordinator). He will assess the progress of discussions and keep them focused on the goal. Where discussions appear to be progressing to agreement, he will permit them to continue, even at the expense of discussions of later topics. Where discussions appear to be stalemated or wandering, he will intervene.

Standards Process

This is the topic of highest priority for the meeting and will be dealt with first. There are some choices of models for this process and the meeting will be provided with overviews of these. The issues that need resolution are

- How do the meeting results get exposed to the wider community? Results may be proposed standards or topics needing further discussion.
- What is the process for getting and responding to comments from the wider community?
- When is a standard declared as agreed to?
- Where and how will the documentation be housed during the standard setting process and once standards are agreed to?
- How will agreement on standards result in implementation?
- What is the process for selecting new topics?
- What is the process for continuing standards setting (meetings, on-line fora, steering committee) and can we set a timetable?

All of the above issues are important but the meeting may not resolve all of these. At the very least, the last bullet must be answered.

The resulting standards process is one that needs to be agreed to by the wider community. It will be necessary to engage groups that identify weaknesses in existing standards to upgrade the standard rather than invent another solution. This necessarily will increase the consultation time, but in the end will greatly improve the international exchange of data and information.

This meeting is a venue for exposing agreed practices carried out by a limited number of partners, to a wider international audience. It may be that these practices are suitable for broader use, but that knowledge of them was not widespread. Providing a mechanism to allow greater scrutiny will help reduce the production of independent solutions. The guiding principle for this process should be adopt first if possible, adapt an existing process if needed, and only create something new as a last resort.

Topics

The list of topics proposed for discussion at the First Standards Forum is purposely longer than it is likely can be managed. There is no requirement for every topic to be discussed at the meeting. Rather, organizers decided on a two-pronged approach. First, no matter what the list of topics, the agenda would be ordered so that those topics that appeared to be closest to agreement would be discussed first. The discussion would
continue until either agreement is reached and a standard can be proposed to the wider community, or it is clear that agreement is not possible.

The meeting may also decide to add other topics to the list, to be discussed at future meetings and also identify suitable experts who could then introduce these topics.

**Presenters**

The annotated agenda includes remarks about each of the topics. It also provides the name of the presenter. This person is expected to act as a resource for that topic and to lead the discussion. The meeting chair will assist as needed to ensure that discussions progress towards a conclusion.

We are expecting the presenter of a topic to provide an overview of the material that was available to the meeting and was reviewed. They should

• identify the clear purpose for this standard (the reason why the international community should agree) and therefore provide a clear focus for the discussion;
• provide a summary of the points of agreement and of disagreement as represented in the material reviewed (and available on the web site http://iodeweb2.vliz.be/omap/Standards/);
• help leading the discussion in order to keep it focused on the objective.

Organizers expect the meeting to state its view on the purpose of the standard, to verify acceptance of the points of agreement, and to attempt to resolve those points of disagreement.

**Timetable**

The agenda is purposely vague on discussion times for each topic. With such a varied agenda, with no precedent for such discussions, and uncertainty about which topics could result in agreement, the best that could be done is to provide a rough breakdown on order of discussion. This order will be discussed as part of adoption of the agenda and may well change. The most important point is that the meeting should discuss first those topics for which it appears that agreement is possible, and that the meeting should not feel compelled to discuss the full agenda.

The full last day has been assigned for review of results and planning of follow-on activities. It is expected that this review will take about one half day. The other half day is held in reserve to allow flexibility in the agenda so that topics can take more time than allocated, provided that progress is being made. No matter the state of discussions, the afternoon of the last day will be used for this review.

**What is Agreement?**

How will participants know that they have reached an agreement? When the meeting has determined that a single course of action meets with its approval, this course of action will be recommended to the wider community. Depending on the topic under discussion, it may be that one controlled vocabulary is agreed to be the one that
everyone should use. Or, it may be that one structure for reporting discovery metadata attains complete agreement at the meeting. In other cases, it may be that a single course of action is unsuitable for all occasions. In this case, the meeting may agree that a limited number of approaches are acceptable. Overall, the meeting will decide by consensus whether or not agreement has been reached.

Some topics, such as QC standards, may require flexibility in the standard. For example, the meeting may not agree on all of the different tests that should be applied, but may agree on a way that the tests that have been applied are recorded with the data. This would leave implementers to devise tests that are particularly suited to their circumstances and yet still follow a standard on reporting tests. A companion approach may allow for agreement of a “core” set of tests that can be agreed to internationally, with specialized tests being implemented to suit national circumstances.

Possible Follow-On Activities

If agreement is reached, a meeting participant will be invited to prepare a document that can be presented to the wider community to engage them in the discussion and to ensure there is broad support. This document will form the basic description of the standard. The meeting will also need to define the term “wider community” as well as the ways to communicate with that community.

If agreement cannot be reached, the meeting will need to rule on what subsequent steps can be taken. If there are competing opinions, the proponents may be asked to prepare the document that jointly lays out the competing views. This document will also be presented to the wider community to seek broad advice on what to do. If there is not enough knowledge at the meeting to reach a conclusion, it may be that some more knowledgeable person(s) will be approached to lead the standards discussion on that topic. It may also be that another Standards Forum will be required to address remaining and other topics, and to review follow-on activities from this meeting. The meeting may wish to recommend the organization of future sessions and call on the organizers to seek ways and means to do so.

Implementation

It is crucial to remember that adherence to any standard is a voluntary activity. If a proposed or agreed standard does not meet the requirements of the community, the standard will be ignored.

It is also important to remember that the standards proposed by this meeting are for international data exchange. A country can adopt whatever practices they wish for internal use. Of course, the objective of this meeting is to gain acceptance and use of the standard in international activities to promote and achieve interoperability and comparability between data systems.