IODE Steering Group for OceanDocs (SG-OceanDocs)

First Meeting
IOC Project Office for IODE
Ostend, Belgium
24–27 January 2012
IODE Steering Group for OceanDocs (SG-OceanDocs)

First Meeting
IOC Project Office for IODE
Ostend, Belgium
24–27 January 2012
Abstract

The OceanDocs Network has been created to provide a multi institutional distributed network of OceanDocs Central and institutional, regional and national repositories to provide a unique access point to marine science publications and research. Until 2011, its’ development had been loosely guided by cooperation between IODE, University of Hasselt, Belgium, and regional Oceanographic Data and Information Networks (ODIN). This first session of the OceanDocs Steering Group builds on the earlier work and takes the OceanDocs Network into the future with a formalized structure and agreed policies.

For bibliographic purposes this document should be cited as follows:

IODE Steering Group for OceanDocs (SG-OceanDocs), First Meeting, Ostend, Belgium, 24–27 January 2012.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OPENING OF THE SESSION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 INTRODUCTION OF PARTICIPANTS</td>
<td>1</td>
</tr>
<tr>
<td>1.2 ADOPTION OF THE AGENDA</td>
<td>1</td>
</tr>
<tr>
<td>1.3 ELECTION OF THE (CO-) CHAIRS</td>
<td>1</td>
</tr>
<tr>
<td>2. PROGRESS REPORTS</td>
<td>1</td>
</tr>
<tr>
<td>2.1 OCEANDOCS STATUS AND POSSIBILITIES</td>
<td>1</td>
</tr>
<tr>
<td>2.2 REPORTS FROM ODINS AND OTHER NODES</td>
<td>2</td>
</tr>
<tr>
<td>2.3 IMPACT ASSESSMENT: HOW IS OCEANDOCS BEING USED AND WHAT IS THE IMPACT</td>
<td>4</td>
</tr>
<tr>
<td>3. ACTION PLAN</td>
<td>4</td>
</tr>
<tr>
<td>3.1 MOBILISING NEW AND EXISTING PARTNERS</td>
<td>4</td>
</tr>
<tr>
<td>3.2 REMEDIAL ACTIONS TO IMPROVE INPUT</td>
<td>4</td>
</tr>
<tr>
<td>3.3 POLICY DEVELOPMENT</td>
<td>5</td>
</tr>
<tr>
<td>3.4 TECHNICAL DEVELOPMENTS</td>
<td>5</td>
</tr>
<tr>
<td>3.5 COOPERATION BETWEEN OCEANDOCS AND AQUATIC COMMONS</td>
<td>5</td>
</tr>
<tr>
<td>4. REPOSITORIES AND DATA</td>
<td>6</td>
</tr>
<tr>
<td>5. ROLE OF THE LOCAL REPRESENTATIVES</td>
<td>6</td>
</tr>
<tr>
<td>5.1 TAKING A STRONG ROLE AS LOCAL REPRESENTATIVE</td>
<td>6</td>
</tr>
<tr>
<td>5.2 DISCOVERY OF WAYS TO ALLOCATE VARIOUS TASKS IN OCEANDOCS</td>
<td>6</td>
</tr>
<tr>
<td>5.3 DEFINING THE ROLE OF THE OCEANDOCS LOCAL MANAGER</td>
<td>6</td>
</tr>
<tr>
<td>6. WORK PLAN FOR THE NEXT INTER-SESSIONAL PERIOD</td>
<td>7</td>
</tr>
<tr>
<td>7. VOA3R</td>
<td>7</td>
</tr>
<tr>
<td>8. AGRIOCLEAN DSPACE – INSTALLATION AND MANAGEMENT</td>
<td>7</td>
</tr>
<tr>
<td>9. TRAINING ON OCEANDOCS AND AGRIOCLEAN DSPACE</td>
<td>8</td>
</tr>
<tr>
<td>10. CLOSING OF THE MEETING</td>
<td>8</td>
</tr>
</tbody>
</table>

**ANNEXES**

I. Agenda of the meeting
II. Action Plan 2012
III. Policy Document (includes its 4 Annexes)
IV. List of Participants
1. OPENING OF THE SESSION

The Chair of the Group, Mr Marc Goovaerts, welcomed the participants to the First Session of the Steering Group of OceanDocs and thanked the IOC Project Office for IODE for hosting the event.

1.1 INTRODUCTION OF PARTICIPANTS

The meeting participants introduced themselves. Mr Mika Odido apologised for not having contributed to the preparatory meeting the previous day (23 January 2012). This was due to a late communication about the need of a contribution from him.

The Technical Secretary, Dr Claudia Delgado, informed the Group about the working documents and called the attention to the provisional Agenda, all available through the IODE web site.

1.2 ADOPTION OF THE AGENDA

Mr Marc Goovaerts introduced the Agenda and aims for the meeting. The Group adopted the Agenda (Annex 1).

1.3 ELECTION OF THE (CO-) CHAIRS

Mr Marc Goovaerts and Ms Pauline Simpson were elected as co-Chairs of the Group. However, it is expected that a member(s) from one of the ODINs would become a Chair or co-Chair of OceanDocs Steering Group, following this two-year intersessional period.

The (co)-Chairs are normally appointed for two sessions. To make it possible that a member of an ODIN could take up the role of co-chair, the term is now limited to one term.

2. PROGRESS REPORTS

2.1 OCEANDOCS STATUS AND POSSIBILITIES

This Agenda item was introduced by Mr Marc Goovaerts. Mr Goovaerts referred to document SG-OceanDocs-I2.1: OceanDocs status. It was noted that:

- the OceanDocs network started in 2004 as a project within the ODINAFRICA project, with 16 partners. Half of these partners became active and created their collections. In 2007 Latin America joined OceanDocs and started to create their own collections. IBSS and CEEMAR (ODINECET) joined later as partners and set up their own repository. In 2009 ODIN PIMRIS joined OceanDocs, although still not being a fully active member of the network.

- OceanDocs is both a repository and a network, and that new functionalities have been recently added. Downloads from OceanDocs have been increasing, with the most visited collections in 2010 being the ones from KMFRI (Kenya) and INIDEP (Argentina). Mr Goovaerts noted, however, that it is needed to install Google analytics to improve statistics quality.

- it would have been valuable to have NIO India participating in the meeting given the fact that they also have their own repository, based on a standard Dspace.

- ODIN PIMRIS is not yet contributing to the OceanDocs repository. They started a repository with Greenstone software. It is not clear what the position of the ODIN
PIMRIS repository is at the moment. It is expected that in the future OceanDocs will also integrate ODIN PIMRIS’ collections.

- there is need to support ODINs with the development of repositories with common standards.
- important cooperation between FAO and UNESCO towards developing common software is required and Mr Goovaerts informed the meeting about the customised version of DSpace, also known as ‘AgriOcean DSpace’ released by FAO and UNESCO-IODE.
- ‘Afrilib’, a federated catalogue developed by ODINAFRICA, implemented with INMagic software, has not been further developed. They have now chosen to use web-based software (ABCD and AgriOcean Dspace) to upgrade Afrilib. With this approach the overlap of tasks between OceanDocs, Afrilib and ASFA could be resolved.
- the use/development of an OAI based solution was suggested for Afrilib, and it was noted that a training event had taken place in Lome (Togo) for 15 partners in 2011 about the use of ABCD and AgriOcean Dspace.
- the VOA3R platform, an EU funded initiative targeting Agriculture and Aquaculture, etc, aims at creating a community of researchers and users, as well as supporting Open Access.
- the importance of high quality of metadata was underlined in order to create high quality services.

2.2 REPORTS FROM ODINS AND OTHER NODES

This Agenda item was introduced by Ms Linda Pikula, Chair of GE-MIM.

Ms Andrea Cristiani (Latin America Community in OceanDocs), presented the report on Latin America Community in OceanDocs (Document SG-OceanDocs-I/2.2.4: ‘Latin America Community in OceanDocs Report on OceanDocs activities 2011). Ms Cristiani noted that the former OdinPubCarsa (2005-2006) became a part of OceanDocs, and informed the meeting that as of 15 Jan 2012, over 1700 documents were available in OceanDocs from the Latin America Community. It was noted that:

- the OceanDocs statistics tools need to be improved. Denys Slipetskyy announced that this was scheduled for the next few months in order to increase the accuracy of the statistical package.
- there is a high use/number of downloads from the Latin America Community in OceanDocs repository, especially from USA-based users. Ms Cristiani informed the meeting that new institutions joined the regional repository from Ecuador, Colombia and Chile. Currently, 23 institutions are part of the ‘Latin America Community in OceanDocs, but six of them have never deposited a record.
- the following actions were taken to promote OceanDocs : Workshop/ Training session in October 2010, Mar del Plata; development of training materials in Spanish on how to input metadata and upload documents in OceanDocs; Training Workshop in Puerto Madryn in April 2010, etc. Two new institutions were contacted in Chile recently, and their inclusion in OceanDocs is under discussion.
- difficulties were faced by ODINCARSA: 1) lack of training, 2) lack of technical guidance after the new DSpace version was released, 3) problems with the batch import tool, amongst other IT problems.
- there is a need to strengthen the role of coordinators at local level, as a strategy to improve OceanDocs.
- Brazil is not part of Latin America Community in OceanDocs due to the fact that Brazil has a strong government policy that all documents need to be published on government portals. Ms Cristiani offered to investigate on how to integrate Brazil resources with OceanDocs.

The SG agreed that Support/Training documents in the English language from AgriOceanDSpace will be uploaded, both on OceanDocs and Ocean Teacher Academy (OTA). However, it will be the responsibility of the communities to make the versions in other languages available.

Ms Saida Messaoudi presented the activities report from ODINAFRICA (Document SG-OceanDocs-I/2.2.5: ODINAFRICA-Report). Ms Messaoudi noted that ODINAFRICA-OceanDocs repository stemmed from the former OdinPubAfrica, which began in 2007. It is now includes 17 communities, and has 1541 documents uploaded as of January 2012. It was noted that:

- the African community still has no clear idea about what an e-repository is, and that most ODINAFRICA institutions have no publishing policy. Further, the poor Internet connections are an additional difficulty. Ms Messaoudi suggested marketing for OceanDocs, and to develop a closer cooperation with ASFA.

- the coverage of ODINAFRICA is still poor and more deposits such as thesis and local journals should be added. One of the main problems is the institutions limited staff. Ms Messaoudi also pointed the need for a scanning project.

Mr Denys Slipetskyy presented the latest developments of ODINECET (Document SG-OceanDocs-I/2.2.1: Action items for ODINECET (2011-2013) and Document SG-OceanDocs-I/2.2.2: IBSS and CEEMaR e-repositories). It was noted that:

- different statistics are currently made available for each institution from ODINECET, one using the Google analytics tool and the other being done at server level, by the web administrator. Both institutions/repositories from ODINECET have now a stable number of users, and a high number of downloads.

- there are newly created repositories in Russia, but these can be integrated or harvested into OceanDocs. Mr Slipetskyy also noted the distinction between AgriOcean and OceanDocs: AgriOcean Dspace is a software that can be used by any of the partners. The OceanDocs repository utilizes the AgriOcean DSpace software.

- ODINECET institutions have their own institutions’ policy, which can be very strict sometimes, making the e-repositories work difficult to accomplish. Furthermore, IT human resources are poor in some places such as far East Russia, and it is still not clear for some administrations why they should support new staff allocated for uploading documents onto the e-repositories.

- the situation of understaffing in Bulgaria, and the need for a specific budget for hardware replacement in the future.

Ms Susana Macanawai presented the latest activities from ODIN PRIMRIS (Document SG-OceanDocs-I/2.2.3: OceanDocs ODIN-PIMRIS Report), and thanked IODE for assisting with their project. Ms Macanawai noted that ODIN-PIMRIS started its activities in 2009 using Greenstone software and is not yet part of OceanDocs. Ms Macanawai also noted that PIMRIS is part of the University of the South Pacific (USP), and involves 12 member countries. It is a small library, mostly focusing on marine and fisheries related thematics, and its portal is hosted by the IODE Project Office. Ms Macanawai informed that the Tonga Fisheries Library recently joined PIMRIS. It was noted that:
- some of the difficulties faced by ODIN-PIMRIS, ranged from an unreliable Internet connection in all islands — leading to server problems, making the e-repository not accessible for long periods of time, lack of qualified human resources, IT delays, to a high staff turnover.

- IT training specifically Website development will be provided to a group of local staff. Mr Aditya Kakodkar will travel to Fiji in March as the IT trainer. Ms Claudia Delgado clarified that this action is not part of OTA activities.

- the new Japan-Pacific ICT Building, which will serve the whole region, will hopefully improve the internet access at regional level, as well as providing IT training.

2.3 IMPACT ASSESSMENT: HOW IS OCEANDOCS BEING USED AND WHAT IS THE IMPACT

This Agenda item was introduced by Mr Marc Goovaerts. With thoughts for its future, the SG thoroughly discussed the Strengths, Weaknesses, Opportunities and Threats for OceanDocs. (Document SG-OceanDocs-I/2.3: OceanDocs Statistics).

Ms Imma Subirats (FAO) offered to share FAO’s editorial policy in case it is of use for OceanDocs. Mr Mika Odido suggested setting up a small group to test the OceanDocs software, before a new training activity on the new features takes place.

3. ACTION PLAN

This Agenda item was introduced by Mr Marc Goovaerts. An Action Plan for the next biennium was discussed and agreed (document SG-OceanDocs-1-3).

3.1 MOBILISING NEW AND EXISTING PARTNERS

This Agenda item was introduced by Mr Marc Goovaerts who noted the need to mobilize different and/or new partners in the near future. Ms Lisa Raymond underlined the need to first focus more on the partners already existing, instead of bringing new partners, which will need strong support at the start. Also, the other ODIN’s not currently represented on OceanDocs should be contacted (ODINBlackSea, ODINCINDIO, WESTPAC as well as the Chinese repository).

Ms Linda Pikula will check the possibilities of contacting the different ODINs with Mr Peter Pissierssens. Mr Goovaerts suggested a survey to assess institutions/other organisations interested on joining OceanDocs.

3.2 REMEDIAL ACTIONS TO IMPROVE INPUT

This Agenda item was introduced by Mr Marc Goovaerts. The input of publications is, except for a few partners, too low. The organizations who have made a clear commitment, by setting up their own repository or by creating a (official or unofficial) policy, are the organizations with the biggest input in OceanDocs. Organizations who have the capacity can therefore set up their own repository. But even more important is the introduction of an Open Access and repository vision in the network. IODE related institutes should have an Open Access and Repository policy, describing the Open Access goals but also the responsibilities and the duties of the staff members and information managers of the institute. In that framework information managers and librarians will have the institutional support to submit the publications of their institute to a local repository or directly into OceanDocs.

The possibilities of scanning legacy material were discussed. On the regional level scanning projects should be developed. Some are in the process eg. ODINECET. Such a
A project can be funded by ASFA, EiFL and even Google. The development of such a project could be a task for the ODIN coordinators of OceanDocs.

The SG agreed that only people and/or institutions who have been fairly active on OceanDocs will be selected to attend future training courses/activities.

### 3.3 Policy Development

This Agenda item was introduced by Ms Pauline Simpson, who presented the OceanDocs Policy Document Version 1 ([Document SG-OceanDocs-I/3.3](#)).

The document was discussed by the SG members. A final revision of the Policy Document will be circulated to the SG in Feb 2012 (Final Version – Annex III). Membership of the Steering Group was discussed and it was identified, that this should also include experts both MIM and Scientific who will be invited to participate as needed to advise OceanDocs SG on specific topics.

### 3.4 Technical Developments

This Agenda item was introduced by Mr Denys Slipetskyy ([Document SG-OceanDocs-I/3.4: AgriOcean DSpace at IAMSLIC](#)).

Mr Denys Slipetskyy reported on the AgriOcean DSpace technical developments. The following implementations were noted:

- AgriOcean DSpace is based now on the DSpace version 1.7.2
- Document type based submission:
  - extended configuration features for submission forms (list of document types available for the particular collection, inheritance mechanism for the forms definitions etc.)
  - Switching between types;
  - Grouping of fields:
    - Definition of field size;
    - Different fields in a row;
  - User can specify language attribute for the field during submission;
- New web pages layout;
- Authority control:
  - Using the new Dspace 1.7 authority functionality
  - Based on local database tables or can use external resource
  - Java script bug for suggesting allowed values was fixed
  - link between field and authority list is defined in input forms definitions (input-forms-extended.xml, and not in dspace.cfg)
  - Authority control for journal titles, Agrovoc and ASFA keywords was implemented;
- Item's edit mode was enhanced up to functionality of submission mode.
- Crosswalk subsystem was enhanced to support meta variables in configuration (field's value, language, authority attributes);
- OAI-PMH now can export metadata in MODS v3 and Agris AP formats;
- AgriOcean DSpace installer for windows platform was developed.
- Source code was made available at: [http://code.google.com/p/agricean](http://code.google.com/p/agricean).
- Easy-installer (Windows Vista, Windows 7, XP) is available on the same resource.

### 3.5 Cooperation between OceanDocs and Aquatic Commons
This Agenda item was introduced by Mr Hardy Schwamm, who presented a brief introduction to the Aquatic Commons (Powerpoint presentation available at http://iode.org/index.php?option=com_oe&task=viewEventDocs&eventID=1017), and noted that since January 2011 it has been hosted by IODE. The Aquatic Commons repository model was developed by IAMSLIC in response to the open access movement and recognizing that not all libraries have the same level of access to technology to implement their own repository. The Aquatic Commons is complementary to OceanDocs.

Future plans include the use of social media and batch import of both metadata and object. A conversion script to upload from ASFA to Aquatic Commons has been completed and is with ASFA for testing.

The SG members noted that Aquatic Commons Board could have a role in facilitating training in the future.

4. REPOSITORIES AND DATA

This Agenda item was introduced by Ms Lisa Raymond (Powerpoint presentation available at http://iode.org/index.php?option=com_oe&task=viewEventDocs&eventID=1017).

Ms Lisa Raymond provided an overview of Woods Hole (MBL/WHOI) Data Publication collaboration activities, with BCO-DMO (Biological and Chemical Oceanography Data Management Office) and Elsevier. Ms Raymond noted the recent success with the submission to a publisher that included DOI for related datasets. Acceptance of this submission is pending.

Ms Raymond further explained about the Simple Web-service Offering Repository Deposit (SWORD) (http://swordapp.org/), and the Metadata Encoding and Transmission Standard (METS) (http://www.loc.gov/standards/mets/) projects, including its workflow. Ms Lisa Raymond underlined the fact that this system is not a dynamic data base system, and can be used only for static data. Ms Raymond also noted file size issues (limited size). Ms Raymond informed that future plans include using Keyhole Markup Language (KML files) to provide geospatial context and support map display.

Ms Raymond noted that a collaboration with Elsevier is under discussion, in partnership with SCOR and IODE.

Ms Raymond noted the on-going cultural change concerning publication, with peer-reviewed parts being more and more published along with datasets.

Mr Hardy Schwamm (IAMSLIC) provided details on DEFRA (Department for Environment, Food and Rural Affairs for England and Wales) DTC (Demonstration Test Catchment) Data Archive (Powerpoint presentation available at http://iode.org/index.php?option=com_oe&task=viewEventDocs&eventID=1017).

5. ROLE OF THE LOCAL REPRESENTATIVES

5.1 TAKING A STRONG ROLE AS LOCAL REPRESENTATIVE
5.2 DISCOVERY OF WAYS TO ALLOCATE VARIOUS TASKS IN OCEANDOCS
5.3 DEFINING THE ROLE OF THE OCEANDOCS LOCAL MANAGER

Agenda items 5.1, 5.2 and 5.3 were introduced by Mr Marc Goovaerts and discussed altogether with agenda item 5.3. (Document SG-OceanDocs-I/5: Role of ODIN representatives).

The SG agreed that it is necessary to first focus on current existing partners, check who has low inputs/contributions, and understand the reasons in order to make them become more
active. The SG agreed that technical support needs to be addressed on a case-by-case approach. The representatives of the different ODINS agreed to prepare a document addressing the specific needs and issues of each region, as detailed as possible. i.e., at the ODIN level, National and institutional.

6. **WORK PLAN FOR THE NEXT INTER-SESSIONAL PERIOD**

   Mr Marc Goovaerts item introduced this Agenda item. The work plan was defined and agreed by the SG for the next inter-sessional period. The SG noted that the next SG meeting should take place after the IODE XXII 22 (2013) (see Annex II for a detailed work plan).

   It was agreed that all SG should contribute recommended information resources to the list in an OceanDocs Steering Group folder on DropBox (set up at the meeting).

   Ms Linda Pikula informed the SG group about the following URL links addressing relevant subjects and issues to OceanDocs.

   - [http://www.sherpa.ac.uk/juliet/](http://www.sherpa.ac.uk/juliet/)

   Mr Thembiane Malapela (FAO) added the following URL link addressing copyright law: [http://aims.fao.org/news/online-open-modules-inform-librarians-about-copyright-law](http://aims.fao.org/news/online-open-modules-inform-librarians-about-copyright-law)

   Mr Goovaerts informed the meeting about the yearly conference on Open Access and the Berlin Declaration on Open Access: ([http://en.wikipedia.org/wiki/Berlin_Declaration_on_Open_Access_to_Knowledge_in_the_Sciences_and_Humanities](http://en.wikipedia.org/wiki/Berlin_Declaration_on_Open_Access_to_Knowledge_in_the_Sciences_and_Humanities)).

7. **VOA3R**

   Mr Marc Goovaerts introduced and presented this Agenda item.

   The VOA3R project, which is an EU funded project aims at creating a platform where scholarly research concerning agriculture, aquaculture and marine sciences will be collected. Its’ focus is on existing platforms, rather than on individual submissions. VOA3R will function as a publications harvester and also as a scientific social network.

   Mr Goovaerts noted that IODE is an external partner of the VOA3R project.

   Mr Goovaerts further noted that the VOA3R has an on-going survey in order to assess the users’ opinion on VOA3R. Some work on evaluating the interface was done in session and attendees and/or their institutions were invited to complete the survey ([Document SG-OceanDocs-I/6: VOA3R: Virtual Open Access Agriculture &Aquaculture Repository: sharing scientific and scholarly research related to agriculture, aquaculture and environment](Document SG-OceanDocs-I/6: VOA3R: Virtual Open Access Agriculture &Aquaculture Repository: sharing scientific and scholarly research related to agriculture, aquaculture and environment)).

8. **AGRIOCENE DSPACE – INSTALLATION AND MANAGEMENT**

   This Agenda item was introduced by Mr Marc Goovaerts. The AgriOcean DSpace software was presented and details on its installations and management were discussed and clarified ([Document SG-OceanDocs-I/7: Easy Installer for AgriOcean DSpace](Document SG-OceanDocs-I/7: Easy Installer for AgriOcean DSpace)).
9. TRAINING ON OCEANDOCS AND AGROCEAN DSPACE

This Agenda item was introduced by Mr Marc Goovaerts. Training on OceanDocs and AgriOcean DSpace was provided to some ODIN participants. (Document SG-OceanDocs-I/8: AgriOcean DSpace metadata set).

10. CLOSING OF THE MEETING

The meeting was closed at 15:00, 27 January 2012. The next meeting will be scheduled later. The Group recommended that physical meetings should take place at the IODE Project Office.
ANNEX I

AGENDA

1. OPENING OF THE MEETING
   1.1. Introduction of participants
   1.2. Adoption of the Agenda
   1.3. Election of the (Co-) Chair(s)

2. PROGRESS REPORTS
   2.1. OceanDocs status and possibilities
   2.2. Reports from ODINs and other nodes
   2.3. Impact assessment: how is OceanDocs being used and what is the impact

3. ACTION PLAN
   3.1. Mobilizing new and existing partners
   3.2. Remedial actions to improve input
   3.3. Policy development
   3.4. Technical developments
   3.5. Cooperation between OceanDocs and Aquatic Commons

4. REPOSITORIES AND DATA

5. ROLE OF THE LOCAL REPRESENTATIVES
   5.1. Taking a strong role as local representative
   5.2. Discovery of ways to allocate various tasks in OceanDocs
   5.3. Defining the role of the OceanDocs local manager

6. WORK PLAN FOR THE NEXT INTER-SESSIONAL PERIOD

7. VOA3R

8. AGROCEAN DSPACE - INSTALLATION AND MANAGEMENT

9. TRAINING ON OCEANDOCS AND AGROCEAN DSPACE

10. CLOSING OF THE MEETING
# Annex II

**Action Plan 2012**

<table>
<thead>
<tr>
<th>DELIVERABLE</th>
<th>RESPONSIBILITY</th>
<th>DUE DATE</th>
<th>NOTES</th>
<th>RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OceanDocs Policy document</td>
<td>Pauline Simpson</td>
<td>Feb 2012</td>
<td>The draft version is ready</td>
<td>Recommend that IODE, the different Odins and the institutes, which are partners in OceanDocs adopt an Open Access policy by signing the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (<a href="http://oa.mpg.de/berlin-prozess/berliner-erklarung/">http://oa.mpg.de/berlin-prozess/berliner-erklarung/</a>)</td>
</tr>
<tr>
<td>2. Copyright guidelines</td>
<td>Pauline Simpson</td>
<td>Feb 2012</td>
<td>Final review by the Steering Group</td>
<td></td>
</tr>
<tr>
<td>3.1. Documentation:</td>
<td>Steering Group coordinated by Marc Goovaerts</td>
<td>Mar 2012</td>
<td>Pauline Simpson created a Dropbox directory and invited the OceanDocs Steering Group. This is a temporary solution (see next action)</td>
<td></td>
</tr>
<tr>
<td>3.2. The general documentation will be available through OceanDocs. The necessary links will be created on the interface. Internal documents will be submitted in a new collection in OceanDocs. External</td>
<td>Marc Goovaerts and Denys Slipetskyy</td>
<td>May 2012</td>
<td></td>
<td>Recommend that the Oceandocs resources will be available through OceanTeacher linked to specific training courses.</td>
</tr>
</tbody>
</table>
### 3.3. Translation of the main internal documents about policy and copyright in French and Spanish

<table>
<thead>
<tr>
<th>Material</th>
<th>Responsible</th>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saïda Messaoudi and Andrea Cristiani</td>
<td>May 2012</td>
<td>Translations will be reviewed. Translations in other languages will be the responsibility of the requesting partners.</td>
<td></td>
</tr>
</tbody>
</table>

### 3.4. Technical documentation and training material (English version) is available through the AIMS Agriocean DSpace pages (http://aims.fao.org/tools/agriocean-dspace). The documents will be updated where necessary

| Steering Group | May 2012 | Translations in other languages, if requested, will be the responsibility of the requesting partners. |

### 4. Request IODE/OceanTeacher to organize a training course on repositories with a focus on OceanDocs during 2012

| Steering Group | Jan 2012 | IODE/OceanTeacher has scheduled a course in Nov. 2012

### 5.1. Creation of a communication strategy document

| ODIN representatives (*) + Linda Pikula | Jun 2012 |

### 5.2. Delivery of an Intermediate Progress Report of activities

| ODIN representatives (*) | Jan 2013 |

### 5.3. Delivery of a Progress Report to the Steering Group Meeting

| ODIN representatives (*) | Jan 2014 | Or one month before the next steering group meeting |

### 5.4. Creation of Odin teams

| ODIN representatives (*) | Mar 2012 | The Odin representatives will create a team of 2-3 information |

Material will be included in OceanTeacher.
<p>| 5.5. | Describing the different operational architectures in support of OceanDocs | ODIN representatives (<em>) + Marc Goovaerts | Marc Goovaerts, ready in Feb 2012 for the policy document |
| 5.6. | Quality control of the OceanDocs submitted deposits | ODIN Teams | (On going) |
| 5.7. | Preparation of material for Information sessions on Open Access, repositories and OceanDocs | ODIN Teams | Minimal 1x/year : e.g. Open Access week |
| 5.8. | Preparation of institute policies on Open Access for Odins and institutes: to be proposed to Odins and institutes | ODIN representatives (</em>) | Jan 2013 |
| 6. | Survey for every participating Odin about: - local/regional repository and Open Access options in addition to OceanDocs and Aquatic Commons - Defining the volume of historical material and annual production | ODIN representatives (*) | Implementation and specification of the OceanDocs policy on the regional and local level |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>of scientific publications in institutes - Availability of an Open Access and repository policy on the different levels (institutes – countries – Odin)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1. Draft of the survey planning</td>
<td>ODIN representatives (*)</td>
<td>Mar 2012</td>
<td></td>
</tr>
<tr>
<td>6.2. Review of the survey planning</td>
<td>Apr 2012</td>
<td>Steering group will participate in the review phase</td>
<td></td>
</tr>
<tr>
<td>6.4. Finalization of the survey report</td>
<td>Sep 2012</td>
<td>Steering Group will participate in the finalization phase</td>
<td></td>
</tr>
<tr>
<td>7. Technical developments on OceanDocs (AgriOcean Dspace):</td>
<td></td>
<td>IODE XXII is requested to support the technical development of the OceanDocs network (meetings, travel, internship, software development etc) – Budget request: 4000$/year during the next session.</td>
<td></td>
</tr>
<tr>
<td>7.1. Finalization of the batch import module for Agris AP (for ASFA partners)</td>
<td>Denys Slipetsky</td>
<td>Feb 2012</td>
<td></td>
</tr>
<tr>
<td>7.2. Survey for a new release of AgriOcean Dspace - Already proposed functionalities: • Batch Import: ASFA version • Authority</td>
<td>Marc Goovaerts</td>
<td>Jun 2012</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Responsible</td>
<td>Date</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td>7.4</td>
<td>New release AgriOcean Dspace</td>
<td>Marc Goovaerts</td>
<td>Oct 2012</td>
</tr>
<tr>
<td>8.</td>
<td>OceanDocs–Aquatic Commons: cooperation</td>
<td>Steering Group</td>
<td>On going</td>
</tr>
<tr>
<td>8.1.</td>
<td>Intermediate Report on cooperation progress</td>
<td>Andrea Cristiani</td>
<td>Jan 2013</td>
</tr>
<tr>
<td>8.2.</td>
<td>Report to Steering Group on cooperation achieved</td>
<td>Andrea Cristiani</td>
<td>Jan 2014</td>
</tr>
<tr>
<td>8.3.</td>
<td>Standardization of metadata between OceanDocs and Aquatic Commons: Agreement on a common core</td>
<td>Hardy Schwamm</td>
<td>Sep 2012</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8.4.</td>
<td>Cooperation between IODE &amp; IAMSLIC on training on repository development (OceanTeacher)</td>
<td>Linda Pikula</td>
<td>Nov 2012</td>
</tr>
<tr>
<td>9.1.</td>
<td>Intersessional Steering Group meeting (Virtual)</td>
<td>Pauline Simpson, Marc Goovaerts</td>
<td>Jan 2013</td>
</tr>
<tr>
<td>9.2.</td>
<td>Project Office OceanDocs Steering Group meeting (Physical)</td>
<td>Pauline Simpson, Marc Goovaerts</td>
<td>Jan 2014</td>
</tr>
<tr>
<td>9.3.</td>
<td>Annual Odin meetings (virtual): Every Odin organizes its own OceanDocs meeting</td>
<td>ODIN representatives</td>
<td>Every year</td>
</tr>
</tbody>
</table>

ODIN representatives (*): Saïda Messaoudi, Andrea Crisitiani, Susana MACANAWAI, and Denys Slipetskyy.
Annex III

Policy Document (including its 4 attachments)

The IOC Repository Network for Marine Science

POLICY DOCUMENT

BACKGROUND

ODINAFRICA was the first Ocean Data and Information Network (ODIN) Project. Within this first ODIN the information management group developed an open access repository, OdinPubAfrica, to contain the scientific literature from African marine science institutes. Since then, other ODIN groups have been organised who were also interested in developing a similar repository project for their region. As a result the OdinPubAfrica repository was extended to accept other ODIN groups and was renamed OceanDocs (http://www.oceandocs.org).

The implementation of the OceanDocs Network:
- Makes scientific research of marine science institutes more quickly, and easily and freely accessible to the research and policy management community,
- Makes local and regional grey literature available on a worldwide scale
- Enhances the internal scientific communication
- Facilitates publishing of research findings (e-journal as well as e-archive), specifically for scientists in Developing Countries thereby promoting their research and increasing their access to the international research forum.

1. STRATEGIC OBJECTIVES

The OceanDocs Network has been created to provide a multi institutional distributed network of OceanDocs Central and institutional, regional and national repositories whose records will be harvested by Avano to provide a unique access point to the publications:
- Development of OceanDocs Central, hosted by IOC/IODE Project Office, to provide a repository for any ODIN or marine related institute within IOC Member States, that does not have the capacity to set up their own repository.
- Development and support of an OceanDocs Network of OAI-compliant repositories (Institutional, National and Regional) hosted by ODINs or individual institutes within ODINs. These provide access to full-text publications/research created by scientists affiliated to oceanographic and marine institutes and managed by their libraries and information centres.
- Integration of document records into AVANO, http://www.ifremer.fr/avano/

Build an IOC/IODE harvester: utilize the harvester functionality within DSpace or an ODIN filter on Avano to facilitate one search capability across OceanDocs Central and all autonomous ODIN Repositories
- Integration of Repositories into ODIN Information Portals, Digital marine atlases and Databases: ASFA, OceanExpert and Datasets linking
- Cooperate with other UN Agencies Repository initiatives to share expertise and investigate interoperability
- Develop a capability to archive other media eg. Data etc.
2. PARTNERS (see list in Annex 1 of the Policy Document)

OceanDocs Network provides repository services at the Central, National, Regional and Institutional level for:
- IOC/IODE
- ODINs: ODINAFRICA, ODINCARSA, ODINCINDIO, ODINECET, ODINPIMRIS, ODINWESTPAC
- Institutes within ODINs
- Individual Institutes within IOC Member States
- OceanDocs Central may also host collections produced by IOC partner agencies at the discretion of the OceanDocs Network Steering Group (eg. SCOR, ASCLME etc).

Partners will:
- appoint 1 or 2 repository coordinators
- implement the OceanDocs Network policy at the local level where possible
- develop promotional activities in the region
- develop capacity building/training on a regional level
- provide Yearly Planning and Activity reports to be delivered to the Co-Chairs of the OceanDocs Network Steering Group.

3. GOVERNANCE

The OceanDocs Network is hosted by the IOC/IODE Programme, and funded through a variety of programmes and projects. The coordination and organisation of the Network is managed by a Steering Group who are tasked with the development of a coherent repository network with a goal of creating better access to research in marine sciences.

MEMBERSHIP OF THE STEERING GROUP

The members of the OceanDocs Steering Group are from the following:

- IODE Project Office; Hasselt Technical Support; an OceanDocs Coordinator from each ODIN; GE-MIM Representative; Aquatic Commons Representative; Invited Experts (MIM & Researchers)
- Ad Hoc Invitations to Advisory Group eg. Partner Agencies, Regional Policy Administrative members
- Chair to be appointed from members, term limit of two sessions
- One meeting every two-year session held between IODE Sessions; other regular meetings will be held in the virtual environment.

RESPONSIBILITIES OF THE STEERING GROUP

The responsibilities of the OceanDocs Steering Group are the following:
- Agree Policy, Strategy and two yearly Operational Plan
- Recommend technical developments and services
- Liaise with complementary organisations in repository matters
- Maintain and implement a dynamic communication strategy
- Support repository training:
- Training session of trainers (for ODIN Coordinators at IOC level)
- Regional training sessions (By ODIN Coordinators in the ODIN)
- Development of training material (in OceanTeacher)
4. POLICIES AND STANDARDS

Partners in the OceanDocs Network agree to a common approach to policy and standards.

SOFTWARE AND TECHNICAL SUPPORT
AgriOcean DSpace is the preferred repository software for OceanDocs Central. AgriOcean DSpace is a joint initiative of FAO and UNESCO-IOC/IODE to provide a customized version of DSpace, an open source, digital repository software. AgriOcean DSpace is maintained, developed and adapted by the Hasselt University Library.

Other repository software packages may be used by Network partners for their own institutional repository, provided they meet recommended metadata standards, but OceanDocs Central cannot provide technical support for these. The use of the same metadata standards and controlled vocabularies is highly recommended (Annex 2).

METADATA STANDARDS
OceanDocs endorses the use of good practices for the creation, management and exchange of bibliographical metadata as it is recommended by Linked Open Data - enabled bibliographic data (LODE-BD) (Annex 2). OceanDocs promotes the use of well-established metadata standards as Dublin Core Metadata Elements or MODS for the exchange of bibliographic metadata.

OceanDocs encourages the use of authority data, controlled vocabularies, and syntax encoding standards whenever possible in order to enhance the quality of interoperability and effectiveness of information exchange. OceanDocs also recommends the use of resource URIs as names for things, for data values when they are available.

METADATA POLICY
OceanDocs indexes, stores and exposes intellectual works in the field of marine science. All bibliographic data are open according to the Open Data Commons Open Database License. In support of this practice, OceanDocs endorses the OpenBiblio Principles as published 17 January, 2011.

Third parties may collect bibliographic data from OceanDocs via automated mechanisms and facilitate end-user services to support the dissemination and retrieval of the repository’s content. OceanDocs general policy is to allow the harvesting of bibliographic data, but explicitly prohibits the automated harvesting of the full content of the intellectual works.

5. ACCESS TO FULL TEXT
The purpose of OceanDocs is to make full text marine science material visible, accessible, harvestable, searchable and usable by any potential user with access to the Internet. Searching and downloading full text documents in OceanDocs is free for any user. Only in special cases, a temporary limitation to access facility may be applied, according to copyright restrictions, e.g. temporary embargo.

Single copies of full text items may be reproduced for personal research or study, education or not-for-profit purposes without prior permission or charge provided the following are displayed:
- The correct citation to authors, title and full bibliographic details
- The hyperlink and /or URL for the original metadata page
- The original copyright statement
- The original Rights permission statement

The content must not be changed in any way.
6. SUBMISSION

It is appreciated that the following conditions may need to be amended in accordance with local ODIN requirements – a copy of the amended ODIN Policy Document should be deposited with the OceanDocs Network Steering Group.

DEPOSITORS
- Items may only be deposited by accredited registered members of the OceanDocs Communities, or their delegated agents.
- Eligible depositors must deposit full texts of their publications, although they may delay making the full text publicly visible to comply with publishers’ embargos.
- The validity and authenticity of the content of submissions is the sole responsibility of the author.
- Submitting authors will be responsible for ensuring the documents they archive do not have any restrictions on their electronic distribution. If the submission task is delegated to other persons (e.g. the librarian), then the institute should clearly state the responsibility of the depositor and the author. This statement can be included in an Institute policy or by completing a Permission to Deposit agreement. (Annex 4).

Duplication of papers in different open repositories is permitted.

CONTENT
OceanDocs is focused on research in marine sciences related fields. The OceanDocs Editorial Team has the right to reject any deposit not deemed to be within the subject scope of the repository.
Only metadata submitted with a full text deposit will be accepted.
The repository accepts the following type of material:
- Journal contribution (article, review, editorial, letter, meeting abstract, note, other)
- Book Section
- Book
- Proceedings paper
- Conference contribution (paper, poster, presentation, other)
- Research reports, including Administrative Reports
- Working paper
- Thesis
- Other (charts, images, sound, video, datasets: the limitation is related to internet access)

COPYRIGHT
- Only items complying with copyright conditions should be deposited (see Annex 3: Copyright Decision Flowchart & Copyright Guidelines).
- A Permission to Deposit Agreement should be signed by the author and filed with the Repository Administrator, where a delegated agent is the depositor (Annex 4). It also can be resolved in an institutional copyright policy document.
- Any copyright violations are entirely the responsibility of the authors.
- If the repository receives proof of copyright violation, the relevant item will be removed immediately.
7. PRESERVATION

The OceanDocs policy for preservation of documents is:
- All materials posted in the OceanDocs will be retrievable but OceanDocs strongly recommends authors to use PDF/a.
- OceanDocs will try to ensure continued accessibility.
- Supported means that OceanDocs will make usable in the future, applying whatever combination of techniques (such as migration, emulation, etc.) is appropriate, given the context of need. Not all proprietary formats can be supported. These files will still be preserved. It is likely that for extremely popular but proprietary formats (such as Microsoft .doc, .xls and .ppt), OceanDocs will be able to help make files in those formats viewable in the future. Items will be retained indefinitely.
- OceanDocs regularly backs up its files according to current best practice.
- Items may be removed at the request of the author/copyright holder, but this is strongly discouraged.
- Acceptable reasons for withdrawal include:
  - Journal publishers’ rules
  - Proven copyright violation or plagiarism
  - Legal requirements and proven violations
  - National security
  - Falsified research
  - Withdrawn items are deleted entirely from the database and metadata will not be searchable.
- If necessary, an updated version may be deposited. In the event of OceanDocs being closed down, the database will be transferred to another appropriate archive.

FILE FORMATS

OceanDocs will fully support and preserve the following formats using either format migration or emulation techniques: (supported: we fully support the format; known: we can recognize the format, but cannot guarantee full support)

<table>
<thead>
<tr>
<th>Description</th>
<th>Extensions</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe PDF/A</td>
<td>pdf</td>
<td>Supported</td>
</tr>
<tr>
<td>Microsoft Word, Powrpoint, Excel</td>
<td>doc, ppt, xls, docx, pptx, elsx</td>
<td>Known</td>
</tr>
<tr>
<td>Open Office</td>
<td>Odt, opp, ods</td>
<td>Known</td>
</tr>
<tr>
<td>Text</td>
<td>txt</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Long-term support for files uploaded in compressed format (zip, rar, 7z, …) is explicitly not guaranteed.
Deposit of other file formats (eg. for images, video, audio, spreadsheets) should be discussed with the Repository Administrator.

DISCLAIMER

A disclaimer will be published on the website:

To the extent permissible under applicable laws, no responsibility is assumed and is hereby disclaimed by OceanDocs Network and for any injury and/or damage to persons or property as a result of any actual or alleged libelous statements, infringement of intellectual property or privacy rights, or products liability, whether
resulting from negligence or otherwise, including without limitation from any use or operation of any ideas, instructions, procedures, products or methods contained in the material therein. Access to the site is provided on an "as is" basis, and neither OceanDocs warrant that the information or software contained herein is complete or accurate or free from error. Information downloaded by the user should be checked for defects or viruses before being used. Submitting authors or delegated agents will be responsible for ensuring the documents they archive do not have any restrictions on their electronic distribution.

Annex 1 (of Policy Document) OceanDocs Network @ Jan 2012

OceanDocs Central at IOC-Ostend:

Africa (ODINAFRICA)
- EGYPT
  - National Institute of Oceanography and Fisheries
- GHANA
  - Marine Fisheries Research Division
- KENYA
  - Kenya Marine and Fisheries Research Institute
- MADAGASCAR
  - Institut Halieutique et des Sciences Marines
- MAURITANIA
  - Institut Mauritanien de Recherches Océanographiques et des Pêches
- MAURITIUS
  - Albion Fisheries Research Centre
- MOROCCO
  - Université Mohammed V-Agdal, Faculté des Sciences
- MOZAMBIQUE
  - INAHINA
  - NatMIRC
- NIGERIA
  - Nigerian Institute for Oceanography and Marine Research
- SENEGAL
  - Direction des Pêches Maritimes / CRODT
- SEYCHELLES
  - Seychelles Fishing Authority
- TANZANIA
  - Institute for Marine Science - Zanzibar
- TOGO
  - Centre de Gestion Intégrée du Littoral et de l'environnement
- TUNISIA
  - Institut National des Sciences et Technologies de la Mer

Latin America (ODINCARSA)
- ARGENTINA
  - Instituto Nacional de Investigación y Desarrollo Pesquero (INIDEP)
  - Centro Austral de Investigaciones Científicas (CADIC)
  - Instituto de Biología Marina y Pesquera Almirante Storni (IBMP)
- CHILE
  - Escuela de Ciencias del Mar. Facultad de Recursos Naturales. Pontificia Universidad Católica de Valparaiso (PUCV)
  - Instituto Antártico Chileno (INACH)
  - Instituto de Fomento Pesquero (IFOP)
  - Servicio Hidrografico y Oceanografico de la Armada de Chile (SHOA)
  - Universidad de Magallanes (UMAG)

- COLOMBIA
  - Instituto de Investigaciones Marinas y Costeras

- CUBA
  - Acuario Nacional de Cuba
  - Centro de Bioproductos Marinos Industrias Pesqueras
  - Instituto de Oceanología
  - Centro de Investigaciones Pesqueras - Ministerio de Industrias Pesqueras

- ECUADOR
  - Escuela Superior Politécnica del Litoral (ESPOL)
  - Instituto Nacional de Pesca
  - Instituto Oceanográfico de la Armada

- MEXICO
  - Universidad Autonoma de Baja California-Ensenada
    - Facultad de Ciencias Marinas
    - Instituto de Investigaciones Oceanológicas

- TRINIDAD & TOBAGO
  - Marine and Coastal Information
  - Institute of Marine Affairs

- URUGUAY
  - Dirección Nacional de Recursos Acuáticos
  - Instituto de Investigaciones Pesqueras

GEOHAB

IODE

CEEMAR (ODINECET repository)
- BULGARIA:
  - Institute of Oceanology – Bulgarian Academy of Sciences (IO-BAS)

- POLAND:
  - Institute of Oceanology PAS, Sopot
  - Sea Fisheries Institute, Gdynia

- RUSSIA:
  - Federal Institute for Fisheries & Oceanography (VNIRO),
    - Moscow
    - Sakhalin Research Institute of Fisheries and Oceanography (SakhNIRO),
    - Yuzhno-Sakhalinsk
  - Scientific-research Institute of the Azov Sea Fishery (AzNIIRKH), Rostov-on-Don
Annex 2 (of Policy Document)

**OCEANDOCS METADATA SCHEMA: RECOMMENDATIONS BASED ON LINKED OPEN DATA-ENABLES BIBLIOGRAPHIC DATA VERSION 1.1.**

Source: [http://aims.fao.org/lode/bd](http://aims.fao.org/lode/bd)

OceanDocs has from the start chosen to support a rich metadata set. It is characterized by its granularity and by the use of ontologies. Metadata formats like MODS and Agris AP are supported. The ASFA and Agrovoc thesauri are used as descriptors and where possible resource URI’s are included. The use of a rich metadata set is necessary to create quality services. The metadata set is still in development and has to be supported by the ODIN and if possible the aquatic community. The guidelines of the LODE-BD will help OceanDocs in the further development of its metadata set. The latest version of OceanDocs Metadata set is always available at: [http://hdl.handle.net/1834/4182](http://hdl.handle.net/1834/4182)

The **Linked Open Data – enabled bibliographic data (LODE-BD)** is a list of recommendations to assist data providers in selecting appropriate encoding strategies to exchange bibliographic metadata as Linked Data. Although LODE-BD focuses on the exchange of data in RDF/XML or RDF, it also contains recommendations about the minimal set of metadata properties, and syntax encoding rules, controlled vocabularies and authority data, necessary to produce, manage and exchange meaningful bibliographic metadata.

**5. Key Principles**

In order to enhance the quality of the interoperability and effectiveness of information exchange, LODE-BD is built on five key principles:

1. To promote the use of well-established metadata standards (Dublin Core, Agris AP, MODS);
2. To encourage the use of authority data, controlled vocabularies, and syntax encoding standards whenever possible (ASFA, Agrovoc, Other possibilities: OceanExpert, Catalogue of Life, GeoNames, ...);
3. To encourage the use of resource URIs as names for things for data values when they are available;
4. To facilitate the decision-making process regarding data encoding for the purpose of exchange and reuse;
5. To provide a reference support that is open for suggestions of new properties and metadata terms according to the needs of the Linked Data community.
Content Model
The definition of a conceptual model helps to establish an overall picture of involving entities and relationships in bibliographic descriptions. In a broader context, the use of a similar conceptual model among data providers should also help to foster a common understanding of the involving data models.

LODE-BD proposes a simple conceptual model based on three entities:
1. Resource: the center of every description,
2. Agent: the responsible body for the creation of the content and/or the dissemination of the resource; and
3. Thema: subjects, topics, concepts, and categories that the resource’s content is about.

The model should provide sufficient capabilities for the data providers to present their content (such as document repositories and library catalogues) for sharing in the traditional environment or transferring to the Linked Data environment.

List of Properties
The LODE-BD Recommendations have identified a list of common properties for describing bibliographic resources based on nine groups: about two dozen properties used for describing a bibliographic resource as well as an additional two sets of properties for describing relations between bibliographic resources or between agents with specific best practice recommendations.

1. Title Information: Title is one of the most important and relevant access points for any resource. The information is usually supplied through a number of properties including title, alternative title- (handling subtitle(s), parallel title(s), translated title(s), transliterated title(s)), and title supplement.
2. Responsible Body: This group contains the properties associated with any agent who is responsible of the creation and publication of the content of the resource, for example, the creator, contributor, and publisher or issuer of a resource.
3. Physical Characteristics: Properties that describe the appearance and the characteristics of the physical form of a resource are placed into this group. They are: date, identifier, language, format, and edition/version.
4. Location/Holdings (physical location): It is considered important for a resource to be located and obtained in the information exchange. Properties that record the location and availability information are taken into account in this unique group.
5. Subject: In contrast to the physical characteristics, the Subject group embraces the properties that describe or otherwise help the identification of what the resource is about or denotes, in the form of subject term, classification/category, freely assigned keyword and geographic term.
6. Description of content: Two major types of descriptions that focus on the content of the resource rather than the physical object are considered in this group: a) any representative description of the content, usually in the form of abstract, summary, note, and table of contents and b) type or genre of the resource.
7. Intellectual property: Any property that deals with an aspect of intellectual property rights relating to access and use of a resource is included in this group, with special regard to rights, terms of use and access condition.
8. Usage: Properties that are related to the use of a resource, rather than the characteristics of the resource itself, are considered to belong to this group. Typical properties are: audience, literary indication, and education Level.
9. Relation: This group has a different perspective for describing the resources from other groups that focus on describing the resource itself. Here various relations between two resources or between two agents are the
focus of description. Due to the significant number of such properties, no specific properties are listed under the Relation group in the following table. Details of the properties designed for describing the relations are introduced in the sections 9.1 and 9.2 of the recommendations.

These groups of information are listed together in Table 1 (of this annex), with the specific properties included in each group. Special attention should also be given to the additional recommendations on cardinality, value control, and important attributes. Table 1 comprises the following components in corresponding columns:

A. Groups of properties
B. Properties included in each group. Two special styles are used to signify the importance of the properties: two plus signs “++” (also in red colour) for the mandatory property; one plus sign “+” (also in blue colour) for the highly recommended property in the context of bibliographic information exchange. The rest are recommended or optional.
C. Requirements of properties in the context of both non-analytical and analytical bibliographic descriptions, specified with (M)andatory, (H)ighly- (R)ecommended, (R)ecommended, and (O)ptional marked for either process.
D. Recommendation on the control of values, indicating (n)ot controlled, should use a name authority or a controlled vocabulary, or should follow a syntax encoding rule.
E. Some important attributes associated with individual properties, with special regard to the language and scheme attributes. A scheme can be either a value-encoding scheme or a syntax-encoding scheme.

Table 1. Groups of Common Properties

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Property</td>
<td>Requirement</td>
<td>Value Control</td>
<td>Important Attributes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[ M</td>
<td>HR</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non Analytical</td>
<td>Analytical</td>
<td></td>
</tr>
<tr>
<td>1. Title Information</td>
<td>title++</td>
<td>M</td>
<td>M</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>alternative title</td>
<td>O</td>
<td>O</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>title supplement</td>
<td>O</td>
<td>O</td>
<td>n</td>
</tr>
<tr>
<td>2. Responsible Body</td>
<td>creator+</td>
<td>HR</td>
<td>HR</td>
<td>n or Name authority (personal, corporate body, conference)</td>
</tr>
<tr>
<td></td>
<td>Contributor</td>
<td>O</td>
<td>O</td>
<td>n or Name authority</td>
</tr>
<tr>
<td></td>
<td>publisher/issuer+</td>
<td>HR</td>
<td>R</td>
<td>n or Name authority</td>
</tr>
<tr>
<td>3. Physical</td>
<td>date++</td>
<td>M</td>
<td>M</td>
<td>Syntax encoding rule</td>
</tr>
<tr>
<td></td>
<td>identifier+</td>
<td>HR</td>
<td>HR</td>
<td>Syntax encoding rule</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Group</strong></td>
<td><strong>Property</strong></td>
<td>Requirement</td>
<td>Value Control</td>
<td>Important Attributes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non Analytical</td>
<td>Analytical</td>
</tr>
<tr>
<td>Characteristics</td>
<td>language++</td>
<td>M</td>
<td>M</td>
<td>Controlled list</td>
</tr>
<tr>
<td></td>
<td>format/medium+</td>
<td>HR</td>
<td>HR</td>
<td>Controlled list</td>
</tr>
<tr>
<td></td>
<td>edition /version</td>
<td>R</td>
<td>R</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>source+</td>
<td>HR</td>
<td>R</td>
<td>n</td>
</tr>
<tr>
<td>4. Location</td>
<td>location++</td>
<td>M</td>
<td>M</td>
<td>n or Rule [Holding unit names may be managed through a controlled list]</td>
</tr>
<tr>
<td></td>
<td>Availability</td>
<td>O</td>
<td>O</td>
<td>n</td>
</tr>
<tr>
<td>5. Subject</td>
<td>subject term+</td>
<td>HR</td>
<td>HR</td>
<td>Controlled vocabulary</td>
</tr>
<tr>
<td></td>
<td>Classification</td>
<td>O</td>
<td>O</td>
<td>Controlled vocabulary, Classification system</td>
</tr>
<tr>
<td></td>
<td>[freely assigned] keyword</td>
<td>R</td>
<td>R</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>geographic term</td>
<td>O</td>
<td>O</td>
<td>Controlled vocabulary</td>
</tr>
<tr>
<td>6. Description of content</td>
<td>description/abstract (or note/summary/table of contents)</td>
<td>R</td>
<td>R</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td>type/form/genre</td>
<td>R</td>
<td>R</td>
<td>Controlled vocabulary</td>
</tr>
<tr>
<td>7. Intellectual property</td>
<td>rights+ term of use access condition</td>
<td>R</td>
<td>R</td>
<td>n [Rights holders may be managed through name authorities]</td>
</tr>
<tr>
<td></td>
<td>Audience</td>
<td>O</td>
<td>O</td>
<td>Controlled list</td>
</tr>
<tr>
<td></td>
<td>literary indication</td>
<td>O</td>
<td>O</td>
<td>Controlled list</td>
</tr>
<tr>
<td></td>
<td>education level</td>
<td>O</td>
<td>O</td>
<td>Controlled list</td>
</tr>
<tr>
<td>9. Relation</td>
<td>[relation between</td>
<td>O</td>
<td>HR</td>
<td>Controlled</td>
</tr>
</tbody>
</table>
Annex 3:
OceanDocs Copyright Decision Flowchart & Copyright Guidelines

Contact title directly requesting permission

Title own statement allow deposit

Ambiguous

Allow self archiving what

Publisher listed in SHERPA

Author submits paper

Who owns copyright

Publisher

Signed publishers agreement language allows deposit

what version submitted:
preprint; postprint; published

No

No

Yes

Yes

Yes

No

Consider depositing pre-print

upload to repository

preprint = author draft before peer review
post print = final peer reviewed version
published version (pdf) = final journal version

reproduced with amendments from Univ George Law
COPYRIGHT GUIDELINES

Copyright laws are not identical in all countries. It is important to be aware of this because academic work frequently crosses national boundaries. Still, there is much in common among national copyright laws because they are based on international agreements, such as the Berne Convention. Always check national copyright and publishers policies.

It is advisable also to know whether:
- The Institute has a policy about retention of copyright ownership
- The Institute uses the Creative Commons License

http://creativecommons.org/about/licenses

Open Access is the immediate, online, free availability of research outputs without restrictions on use commonly imposed by publisher copyright agreements. Open Access includes the outputs that scholars normally give away for free for publication; it includes peer-reviewed journal articles, conference papers and datasets of various kinds. Open Access provides the means to maximise the visibility and availability, and thus the uptake and use, of research outputs.

Copyright: the main question is whether a work has been published. If it has not yet been published, the author holds the copyright. When a work is published, the key question is whether the rights have been transferred in writing to the publisher by means of a contract. If no contract has been signed, the author owns the copyright and can determine how the work is used. In the case of a signed contract, much will depend on the wording of the contract.

- Contracts are not absolute. Authors that receive contracts from publishers can stipulate a clause whereby they stipulate that they want to place the work to be published in an Open Access Repository. An increasing number of publishers agree to such stipulations. There are also many publishers that have already included such permission in their own policies. However, different publishers have different policies in this regard. For information about publishers’ policies that could affect you, see, for example, the Sherpa web pages. Publisher Copyright Policies & Self Archiving
http://www.sherpa.ac.uk/romeo

There, you will also find those publishers that object to pre-publication in the form of a working paper or something similar. Most publishers prefer to use such pre-publications for finding interesting texts; but an occasional publisher will object to this.

If the publisher does not provide the author with a written contract for signing, the author is free to publish in the journal and deposit the article in an OA Repository. If the author does receive a contract for signing, the author must stipulate certain rights in the contract with the publisher. There are two methods of doing this:

1. The author can retain the copyright themselves, but grant the publisher certain rights, for example, the right to publication in a journal
2. The author can assign the copyright to the publisher in the contract, but at the same time stipulate that he/she may place your article in an academic repository
3. The author informs the publisher that as a requirement of his project funding from which the paper was produced, he/she is required to deposit in an OA Repository.

Three different situations:
1. Storage before actual commercial publication (pre-print)
2. Parallel publishing
3. Storage after actual commercial publication (post-print)

Storage before actual publication
Authors hold all rights to their work. They may therefore decide whether they want to have their work included in a repository. If authors store their work in an OA repository, for example as a working paper or as a research memorandum, they retain the option of offering this work to a commercial publisher for inclusion in a journal. Most publishers no longer object to this. On the contrary, publishers also consult OA repositories in their search for suitable articles.

Parallel publishing
Some publications, for example dissertations or publications at your own institute, may be placed in the repository and published by the Institute simultaneously. Authors retain all rights to their work.

Storage after actual publication
The possibilities of storage in an OA repository after publication of a work will depend on whether a written contract has been concluded with the publisher and, if so, the stipulations in that contract. Publishers usually stipulate an embargo. This means that, although a paper will be included in the OA repository, the full text will only be available after a specific period. As a rule, this period will be six months, sometimes a year, after commercial publication. In any case, realise that publishers may own rights to a specific text, a specific article or book. Any changes made to the contents constitute a new work with new rights.

Several examples:
1. There is no written contract concluded with the publisher
   Author owns all rights to the work because no transfer of rights has taken place.
2. There is a written contract
   a. Exclusive rights
      The publisher owns all commercial rights to the author’s work, or the author must have specific conditions included in the contract.
   b. Non-exclusive rights
      It is not unusual for a publisher to own the rights to distribute a work in printed form. Sometimes a publisher also has the rights to an electronic edition of the work, but authors can also hold the rights to exploit their work, for example, the right to place his work in an OA repository.
   c. Other contracts
      A contract is binding. Read the author’s contract to see which publication potential can be exploited. Anything that is not expressly prohibited is permitted. If a contract explicitly states that authors may not place their work in an OA repository, they can try to delete this stipulation. If that is not possible, they can always ask the publisher for permission later to place their work in an OA repository.
3. There is mention in the colophon that the author has relinquished his rights
   A colophon is not a contract. Without a contract, there is no legal transfer of rights. The author still retains all rights to his work.
4. Verbal agreements
   If the author agrees verbally that their work will be included in a specific edition of a journal, he will still own all rights to his work.
   As mentioned above, virtually all publishers permit pre-print publication of author’s work (“working paper”). An increasing number of publishers have also decided that post-print publications are permitted. Publishers allow articles, after publication in journals, to be included in repositories in the
author's final version. You are free to make changes, but you may not use the format of the journal. You must also include a reference to the publisher’s website.
Authors should take care to save their final version – the version that is sent to the publisher for publication. Even better, send the latest version (pre-print) both to their publisher and to OceanDocs. If the author makes a habit of this, nothing can go wrong.

Co-authorship
If Authors co-write an article and the contribution is interwoven in the text to the point that reference can no longer be made to it, this is called co-authorship. That means that, in order to place the article in a repository, the author will require permission from his co-authors.
When sections of an article are clearly written by different authors, the author will own the copyright to the section of the article written by him. In both cases, it is desirable that they ask their co-author or authors for permission to upload into the repository, so that the complete article can be included.
ANNEX IV

List of Participants:

**ODIN/OceanDocs representative**

Lic. Andrea CRISTIANI  
Chief Librarian  
Centro de Documentacion y Biblioteca  
Instituto de Investigaciones Pesqueras  
Montevideo  
Uruguay  
Email: andrea.cristiani@gmail.com

Ms Susana MACANAWAI  
Coordinator  
University of South Pacific, Faculty of Science, Technology & Environment  
The University of the South Pacific  
Private Mail Bag, Laucala Campus  
Suva  
Fiji  
Tel: (679) 323 2934  
Fax: (679) 323 1526  
Email: macanawai_s@usp.ac.fj

Ms Saida MESSAOUDI  
Librarian  
Institut National des Sciences et Technologies de la Mer, Monastir  
28, rue 2 mars 1934  
2025 Salammbo  
Tunis  
Tunisia  
Tel: +(216) 730 420  
Fax: +(216) 732 622  
Email: saidamess@gmail.com

Mr Denys SLIPETSKYY  
lead engineer  
National Academy of Sciences of Ukraine, O. O. Kovalevsky Institute of Biology of the Southern Seas  
Nakhimova 2, Sevastopol  
Sevastopol  
99011  
Ukraine  
Tel: +380671321453  
Email: d.slipetskyy@ibss.org.ua

**Invited Expert**

Ms Lisa RAYMOND  
Associate Library Director  
Woods Hole Oceanographic Institution  
Woods Hole MA 02543  
United States  
Tel: 1 508 289 3557  
Fax: 1 508 457 2156  
Email: lraymond@whoi.edu

Mrs Pauline SIMPSON  
Programme Coordinator  
Central Caribbean Marine Institute  
PO Box 10152  
Grand Cayman  
KY1-1002  
Cayman Islands  
Tel: +(1) 345 949 1244  
Email: psimpson07@aol.com

Mr Marc GOOVAERTS  
Director  
Universiteit Hasselt  
Campus Diepenbeek  
Agoralaan  
3590 Diepenbeek  
Belgium  
Tel: + 32 (0) 11 26 81 24  
Fax: + 32 (0) 11 26 81 24  
Email: marc.goovaerts@uhasselt.be

Ms. Linda PIKULA  
Regional Librarian  
NOAA Central and Regional Libraries  
4301 Rickenbacker Causeway  
Miami Florida 33149  
United States  
Tel: 305-361-4429  
Fax: 305-361-4552  
Email: linda.pikula@noaa.gov

Chair SG-OceanDocs

Chair GE-MIM
IODE Secretariat

Dr. Claudia DELGADO
IODE Training Coordinator
UNESCO/IOC Project Office for IODE
Wandelaarkaai 7 - Pakhuis 61
B-8400 Oostende
Belgium
Tel: +32 59 34 01 86
Fax: +32 59 34 01 52
Email: claudia.delgado@iode.org

Mr. Aditya NAIK KAKODKAR
IT Expert
Wandelaarkaai 7/61
8400 Oostende
West-Vlaanderen
Belgium
Tel: +32 59 34 01 75
Fax: +32 59 34 01 52
Email: a.naik-kakodkar@unesco.org

Mr Mika ODIDO
Coordinator, IODE Regional Activities
UNESCO/IOC Project Office for IODE
Wandelaarkaai 7 - Pakhuis 61
B-8400 Oostende
Belgium
Tel: +32 59 34 01 76
Fax: +32 59 34 01 52
Email: m.odido@unesco.org

Mr Peter PISSIERSENS
Head, IOC Project Office for IODE, Oostende, Belgium
UNESCO/IOC Project Office for IODE
Wandelaarkaai 7 - Pakhuis 61
B-8400 Oostende
Belgium
Tel: +32-59-340158
Fax: +32-59-79 5220
Email: p.pissierssens@unesco.org

IAMSPLIC representative

Mr. Hardy SCHWAMM
Collections Manager
Freshwater Biological Association
The Ferry Landing
Far Sawrey
Ambleside - Cumbria
LA22 0LP
United Kingdom
Tel: +44 (0)1539 442468
Email: hschwamm@fba.org.uk

FAO representatives

Thembani MALAPELA
FAO Food and Agriculture Organization of the UN, Headquarters
Viale delle Terme di Caracalla
00153 Roma
Italy
Email: thembani.malapela@fao.org

Imma SUBIRATS
Knowledge and Information Management Officer
FAO Food and Agriculture Organization of the UN, Headquarters
Viale delle Terme di Caracalla
00153 Rome
Italy
Email: imma.subirats@fao.org
In this Series, entitled

**Reports of Meetings of Experts and Equivalent Bodies**, which was initiated in 1984 and which is published in English only, unless otherwise specified, the reports of the following meetings have already been issued:

1. Third Meeting of the Central Editorial Board for the Geological/Geophysical Atlases of the Atlantic and Pacific Oceans
3. First Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
4. First Session of the IOC-UN(OETB) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
5. First Session of the Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
6. First Session of the Joint CCOP(SOPAC)-IOC Working Group on South Pacific Tectonics and Resources
7. First Session of the IODE Group of Experts on Marine Information Management
8. First Session of the IOC-UNEP Group of Experts on Marine Pollution
9. First Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercomparison
10. Fifth Session of the IOC Consultative Group on Ocean Mapping *(Also printed in French and Spanish)*
11. Joint 100-WMO Meeting for Implementation of IGOSS XBT Ships-of-Opportunity Programmes
12. Second Session of the Joint CCOP-SOPAC-IOC Working Group on South Pacific Tectonics and Resources
13. Third Session of the Group of Experts on Format Development
14. Eleventh Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
15. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
16. Seventh Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercomparison
17. Second Session of the IOC Group of Experts on Effects of Pollutants
18. Primera Reunión del Comité Editorial de la COI para la Carta Batimétrica Internacional del Mar Caribe y Parte del Océano Pacífico frente a Centroamérica *(Spanish only)*
19. Third Session of the Joint CCOP-SOPAC-IOC Working Group on South Pacific Tectonics and Resources
20. Twelfth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
21. Second Session of the IODE Group of Experts on Marine Information Management
22. First Session of the IOC Group of Experts on Ocean Mapping and Geophysics in the Western Pacific
23. Second Session of the IOC-UN(OETB) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources *(Also printed in French and Spanish)*
24. Third Session of the IOC Group of Experts on Effects of Pollutants
25. Eighth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercomparison
26. Seventh Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans *(Also printed in French)*
27. Second Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
28. First Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
29. First Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercomparison
30. First IOC-FAO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
31. Eleventh Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
32. Second Session of the IOC Task Team on the Global Sea-Level Observing System
33. Second Session of the IOC Task Team on the Global Sea-Level Observing System
34. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
35. Fourth Session of the IOC-UNEP-IMO Group of Experts on Marine Pollution
36. First Consultative Meeting on RNODCs and Climate Data Services
37. Second Joint IOC-WMO Meeting of Experts on IGOSS-IODE Data Flow
38. Fourth Session of the Joint CCOP-SOPAC-IOC Working Group on South Pacific Tectonics and Resources
39. Fourth Session of the IODE Group of Experts on Technical Aspects of Data Exchange
40. Eleventh Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asia Tectonics and Resources
41. Third Session of the IOC Consultative Group on Ocean Mapping
43. First Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
44. Third Session of the IOC-UN(OALOS) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
45. Ninth Session of the IOC-OALOS Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
46. Second Session of the IOC Consultative Group on Ocean Mapping
47. Cancelled
48. Seventh Session of the Joint CCOP-SOPAC-IOC Working Group on South Pacific Tectonics and Resources
49. Fifteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asian Tectonics and Resources
50. Third Joint IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
51. First Session of the IOC Group of Experts on the Global Sea-Level Observing System
52. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean
53. Fifth Session of the IOC-UNEP-IMO Group of Experts on Marine Pollution
54. Fifth Session of the IOC-UNEP-IMO Group of Experts on Marine Pollution
55. Fifth Session of the IOC-WMO Group of Experts on Operations and Technical Applications
56. Fourth Session of the IOC Consultative Group on Marine Pollution
57. Fifth Session of the IOC-UNEP-IMO Group of Experts on Marine Pollution
58. Fourth Session of the IOC Consultative Group on Ocean Mapping
59. Second Session of the IOC-WMO/IGOSS Group of Experts on Operations and Technical Applications

*(Also printed in French)*
60. Second Session of the IOC Group of Experts on the Global Sea-Level Observing System
61. UNEP-IOC-WMO Meeting of Experts on Long-Term Global Monitoring System of Coastal and Near-Shore Phenomena Related to Climate Change
62. Third Session of the IOC-FAO Group of Experts on the Programme of Ocean Science in Relation to Living Resources
63. Second Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
64. Joint Meeting of the Group of Experts on Pollutants and the Group of Experts on Methods, Standards and Intercalibration
65. First Meeting of the Working Group on Oceanographic Co-operation in the ROPME Sea Area
66. Fifth Session of the Editorial Board for the International Bathymetric and its Geological/Geophysical Series
67. Thirteenth Session of the IOC-IHO Joint Guiding Committee for the General Bathymetric Chart of the Oceans (Also printed in French)
68. International Meeting of Scientific and Technical Experts on Climate Change and Oceans
69. UNEP-IOC-WMO-IUCN Meeting of Experts on a Long-Term Global Monitoring System
70. Fourth Joint IOC-WMO Meeting for Implementation of IGOSST XBT Ship-of-Opportunity Programmes
71. ROPME-IOC Meeting of the Steering Committee on Oceanographic Co-operation in the ROPME Sea Area
72. Seventh Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of ‘El Niño’ (Spanish only)
73. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (Also printed in Spanish)
74. UNEP-IOC-ASPEI Global Task Team on the Implications of Climate Change on Coral Reefs
75. Third Session of the IOIE Group of Experts on Marine Information Management
76. Fifth Session of the IOIE Group of Experts on Technical Aspects of Data Exchange
77. ROPME-IOC Meeting of the Steering Committee for the Integrated Project Plan for the Coastal and Marine Environment of the ROPME Sea Area
78. Third Session of the IOC Group of Experts on the Global Sea-level Observing System
79. Third Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
80. Fourteenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans
81. Fifth Joint ICG-WMO Meeting for Implementation of IGOSST XBT Ship-of-Opportunity Programmes
82. Second Meeting of the UNEP-IOC-ASPEI Global Task Team on the Implications of Climate Change on Coral Reefs
83. Seventh Session of the JSC Ocean Observing System Development Panel
84. Fourth Session of the IOIE Group of Experts on Marine Information Management
85. Sixth Session of the IOC Editorial Board for the International Bathymetric chart of the Mediterranean and its Geological/Geophysical Series
86. Fourth Session of the Joint IOC-JGOFS Panel on Carbon Dioxide
87. First Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Pacific
88. Eighth Session of the JSC Ocean Observing System Development Panel
89. Ninth Session of the JSC Ocean Observing System Development Panel
90. Sixth Session of the IOIE Group of Experts on Technical Aspects of Data Exchange
91. First Session of the IOC-FAO Group of Experts on OSLR for the IOCINCWIO Region
92. Fifth Session of the Joint IOC-JGOFS CO, Advisory Panel Meeting
93. Tenth Session of the JSC Ocean Observing System Development Panel
94. First Session of the Joint CMM-IGOSST-IODE Sub-group on Ocean Satellites and Remote Sensing
95. Third Session of the IOC Editorial Board for the International Chart of the Western Indian Ocean
96. Fourth Session of the IOC Group of Experts on the Global Sea Level Observing System
97. Joint Meeting of GEMS and GEEP Core Groups
98. First Session of the Joint Scientific and Technical Committee for Global Ocean Observing System
99. Second International Meeting of Scientific and Technical Experts on Climate Change and the Oceans
100. First Meeting of the Officers of the Editorial Board for the International Bathymetric Chart of the Western Pacific
101. Fifth Session of the IOIE Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico
102. Second Session of the Joint Scientific and Technical Committee for Global Ocean Observing System
103. Fifteenth Session of the Joint IOIE-IHO Committee for the General Bathymetric Chart of the Oceans
104. Fifth Session of the IOC Consultative Group on Ocean Mapping
105. Fifth Session of the IOIE Group of Experts on Marine Information Management
106. IOC-NOAA Ad hoc Consultation on Marine Biodiversity
107. Sixth Joint IOC-WMO Meeting for Implementation of IGOSST XBT Ship-of-Opportunity Programmes
108. Third Session of the Health of the Oceans (HOTO) Panel of the Joint Scientific and Technical Committee for GLOSS
109. Second Session of the Strategy Subcommittee (SSC) of the IOC-WMO-UNEP Intergovernmental Committee for the Global Ocean Observing System
110. Third Session of the Joint Scientific and Technical Committee for Global Ocean Observing System
111. First Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate
112. Sixth Session of the Joint IOC-JGOFS C02 Advisory Panel Meeting
113. First Meeting of the IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional - Global Ocean Observing System (NEAR-GOOS)
114. Eighth Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of ‘El Niño’ (Spanish only)
115. Second Session of the IOC Editorial Board of the International Bathymetric Chart of the Central Eastern Atlantic (Also printed in French)
116. Tenth Session of the Officers Committee for the Joint IOC-IHO General Bathymetric Chart of the Oceans (GEBCO), USA, 1996
117. IOC Group of Experts on the Global Sea Level Observing System (GLOSS), Fifth Session, USA, 1997
121. IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional Global Ocean Observing System (NEAR-GOOS), Second Session, Thailand, 1997

2
122. First Session of the IOC-IUCN-NOAA Ad hoc Consultative Meeting on Large Marine Ecosystems (LME), France, 1997
123. Second Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), South Africa, 1997
124. Sixth Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico, Colombia, 1996 (also printed in Spanish)
125. Seventh Session of the IOE Group of Experts on Technical Aspects of Data Exchange, Ireland, 1997
126. IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), First Session, France, 1997
127. Second Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LME), France, 1998
128. Sixth Session of the IOC Consultative Group on Ocean Mapping (CGOM), Monaco, 1997
129. Sixth Session of the Tropical Atmosphere - Ocean Array (TAO) Implementation Panel, United Kingdom, 1997
132. Sixteenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (GEBCO), United Kingdom, 1997
134. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean (IOC/EB-ICBWIO-IW3), South Africa, 1997
136. Seventh Session of the Joint IOC-JGOFS C02 Advisory Panel Meeting, Germany, 1997
137. Implementation of Global Ocean Observations for GOOS/GCOS, First Session, Australia, 1998
139. Second Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System (GOOS), Brazil, 1998
140. Third Session of IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional - Global Ocean Observing System (NEAR-GOOS), China, 1998
143. Seventh Session of the Tropical Atmosphere-Ocean Array (TAO) Implementation Panel, Abidjan, Côte d'Ivoire, 1998
144. Sixth Session of the IOE Group of Experts on Marine Information Management (GEMIM), USA, 1999
145. Second Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System (GOOS), China, 1999
146. Third Session of the IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), Ghana, 1999
147. Fourth Session of the GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC); Fourth Session of the WCRP CLIVAR Upper Ocean Panel (UOP); Special Joint Session of OOPC and UOP, USA, 1999
149. Eighth Session of the Joint IOC-JGOFS C02 Advisory Panel Meeting, Japan, 1999
150. Fourth Session of the IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional – Global Ocean Observing System (NEAR-GOOS), Japan, 1999
151. Seventh Session of the IOC Consultative Group on Ocean Mapping (CGOM), Monaco, 1999
152. Sixth Session of the IOC Group of Experts on the Global Sea level Observing System (GLOSS), France, 1999
153. Seventeenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (GEBCO), Canada, 1999
154. Comité Editorial de la COI para la Carta Batimétrica Internacional del Mar Caribe y el Golfo de Mexico (IBCCA), Señitima Reunión, Mexico, 1998
155. IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (IBCCA), Seventh Session, Mexico, 1998
156. Initial Global Ocean Observing System (GOOS) Commitments Meeting, IOC-WMO-UNEP-ICSI/Impl-III/3, France, 1999
157. First Session of the ad hoc Advisory Group for IOCARIBE-GOOS, Venezuela, 1999 (also printed in Spanish and French)
158. Fourth Session of the IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), China, 1999
162. Eighth Session of the IOE Group of Experts on Technical Aspects of Data Exchange, USA, 2000
163. Third Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LME), France, 2000
164. Fifth Session of the IOC-WMO-UNEP-ICSU Coastal Panel of the Global Ocean Observing System (GOOS), Poland, 2000
165. Third Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System (GOOS), France, 2000
166. Second Session of the ad hoc Advisory Group for IOCARIBE-GOOS, Cuba, 2000 (also printed in Spanish and French)
167. First Session of the Coastal Ocean Observations Panel, Costa Rica, 2000
168. First GOOS Users’ Forum, 2000
170. First Session of the Advisory Body of Experts on the Law of the Sea (ABE-LOS), France, 2001 (also printed in French)
171. Fourth Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System, Chile, 2001
172. First Session of the IOC-SCOR Ocean CO2 Advisory Panel, France, 2000
173. Fifth Session of the GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), Norway, 2000 (electronic copy only)
174. Third Session of the ad hoc Advisory Group for IOCARIBE-GOOS, USA, 2001 (also printed in Spanish and French)
175. Second Session of the Coastal Ocean Observations Panel and GOOS Users’ Forum, Italy, 2001
176. Second Session of the Black Sea GOOS Workshop, Georgia, 2001
177. Fifth Session of the IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional – Global Ocean Observing System (NEAR-GOOS), Republic of Korea, 2000
178. Second Session of the Advisory Body of Experts on the Law of the Sea (IOC/ABE-LOS), Morocco, 2002 (also printed in French)
179. Sixth Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), Australia, 2001 (electronic copy only)
180. Cancelled
181. IOC Workshop on the Establishment of SEAGOOS in the Wider Southeast Asian Region, Seoul, Republic of Korea, 2001
(SEAGOOS preworkshop) (electronic copy only)
182. First Session of the IODE Steering Group for the Resource Kit, USA, 19–21 March 2001
183. Fourth Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LMEs), France, 2002
184. Seventh Session of the IODE Group of Experts on Marine Information Management (GEMIM), France, 2002 (electronic copy only)
185. Sixth Session of IOC/WESTPAC Coordinating Committee for the North-East Asian Regional – Global Ocean Observing System (NEAR-GOOS), Republic of Korea, 2001 (electronic copy only)
186. First Session of the Global Ocean Observing System (GOOS) Capacity Building Panel, Switzerland, 2002 (electronic copy only)
187. Fourth Session of the ad hoc Advisory Group for IOCARIBE-GOOS, 2002, Mexico (also printed in French and Spanish)
188. Fifth Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean (IBCWIQ), Mauritius, 2000
189. Third session of the Editorial Board for the International Bathymetric Chart of the Western Pacific, China, 2000
192. Third Session of the Advisory Body of Experts on the Law of the Sea (IO/ABE-LOS), Lisbon, 2003 (also printed in French)
(Spanish only; electronic copy only)
196. Fourth Session of the Coastal Ocean Observations Panel, South Africa, 2002 (electronic copy only)
198. Fifth Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LMEs), Paris, 2003
199. Ninth Session of the IOC Consultative Group on Ocean Mapping, Monaco, 2003
(Recommendations in English, French, Russian and Spanish included)
200. Eighth Session of the IOC Group of Experts on the Global Sea level Observing System (GLOSS), France, 2003 (electronic copy only)
201. Fourth Session of the Advisory Body of Experts on the Law of the Sea (IO/ABE-LOS), Greece, 2004 (also printed in French)
202. Sixth Session of the IOC-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LMEs), Paris, 2004 (electronic copy only)
203. Fifth Session of the Advisory Body of Experts on the Law of the Sea (IO/ABE-LOS), Argentina, 2005 (also printed in French)
204. Ninth Session of the IOC Group of Experts on the Global Sea level Observing System (GLOSS), France, 2005 (electronic copy only)
205. Eighth Session of the IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional – Global Ocean Observing System (NEAR-GOOS), China, 2003 (electronic copy only)
206. Sixth Meeting of the Advisory Body of Experts on the Law of the Sea (IO/ABE-LOS), Spain, 2006 (also printed in French)
207. Third Session of the Regional Forum of the Global Ocean Observing System, South Africa, 2006 (electronic copy only)
208. Seventh Session of the IOC-UNEP-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LMEs), Paris, 2005 (electronic copy only)
209. Eighth Session of the IOC-UNEP-IUCN-NOAA Consultative Meeting on Large Marine Ecosystems (LMEs), Paris, 2006 (electronic copy only)
210. Seventh Meeting of the IOC Advisory Body of Experts on the Law of the Sea (IO/ABE-LOS), Gabon, 2007 (bilingual English/French)
211. First Meeting of the IOC Working Group on the Future of IOC, Paris, 2008 (Executive Summary in English, French, Russian and Spanish included)
212. First meeting of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), Paris, 3–4 April 2008 (Executive Summary in English, French, Russian and Spanish included)
213. First Session of the Panel for Integrated Coastal Observation (PICO-I), Paris, 10–11 April 2008 (electronic copy only)
214. Tenth Session of the IOC Group of Experts on the Global Sea level Observing System (GLOSS), Paris, 6–8 June 2007 (electronic copy only)
217. Second Working Session of the Working Group on Tsunamis Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), Paris, 27 March 2009 (Executive Summary in English, French, Russian and Spanish included)
219. First Session of the IOC-SCOR International Ocean Carbon Coordination Project (IOCCP) Scientific Steering Group (also IOCCP Reports, 3), Broomfield, Colorado, U.S.A., 1 October 2005 (electronic copy only)
220. Second Session of the IOC-SCOR International Ocean Carbon Coordination Project (IOCCP) Scientific Steering Group (also IOCCP Reports, 6), Paris, France, 20 April 2007 (electronic copy only)
221. Third Session of the IOC-SCOR International Ocean Carbon Coordination Project (IOCCP) Scientific Steering Group (also IOCCP Reports, 10), Villefranche-sur-mer, France, 3–4 October 2008 (electronic copy only)
222. Fourth Session of the IOC-SCOR International Ocean Carbon Coordination Project (IOCCP) Scientific Steering Group (also IOCCP Reports, 15), Jena, Germany, 14 September 2009 (electronic copy only)
223. First Meeting of the joint IOC-ICES Study Group on Nutrient Standards (SGONS) (also IOCCP Reports, 20), Paris, France, 23–24 March 2010 (Executive Summary in E, F, R, S included)
224. Third Session of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), Lisbon, Portugal, 5–6 May 2010 (Executive Summary in English, French, Russian and Spanish included)
226. Second Session of the Panel for Integrated Coastal Observation (PICO-II), Paris, 24–26 February 2009 (electronic copy only)
227. First meeting of the Task Team on Seismic Data in the exchange in South West Pacific of the IC/GPTWS Regional Working Group for the Southwest Pacific, Port Vila, Vanuatu, 19–20 October 2009 (electronic copy only)
228. Fourth Session of the Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), Paris, France, 20–21 March 2011 (Executive Summary in English, French, Russian and Spanish included)
229. Second Session of the IODE Steering Group for Ocean Teacher (SG-OT), Miami, Florida, 11–15 April 2011
230. First Meeting of the Inter-ICO Task Team 1 on Sea Level Monitoring for Tsunami (Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), Seattle, USA, 29 November–1 December 2010
231. First Meeting of the Inter-ICG Task Team 2 on Disaster Management and Preparedness (Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), Seattle, USA, 29 November–1 December 2010
232. First Meeting of the Inter-ICG Task Team 3 on Tsunami Watch Operations (Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS-WG), Seattle, USA, 29 November–1 December 2010
233. Primera Reunión del Grupo de Trabajo Regional para América Central del Grupo Intergubernamental de Coordinación del Sistema de Alerta contra los Tsunamis y Atenuación de sus Efectos en el Pacífico (ICG/PTWS), Managua (Nicaragua) del 4 al 6 de noviembre de 2009 (Resumen dispositivo en español e inglés)
234. Segunda Reunión del Grupo de Trabajo Regional para América Central del Grupo Intergubernamental de Coordinación del Sistema de Alerta contra los Tsunamis y Atenuación de sus Efectos en el Pacífico (ICG/PTWS), San Salvador (El Salvador) del 28 al 30 de septiembre de 2011 (Resumen dispositivo en español e inglés)
235. First Session of the Joint IODE-JCOMM Steering Group for the Global Temperature-Salinity Profile Programme (SG-GTSPP), 16–20 April 2012, Ostend, Belgium
236. Ad hoc Session of the Joint JCOMM-IODE Steering Group for the Ocean Data Standards Pilot Project (SG-ODSPP), 23–25 April 2012, Ostend, Belgium
237. First Meeting of the Regional Working Group on Tsunami Warning and Mitigation System for the South China Sea Region (SCS-WG), 12–14 December 2011, Sanya, China
238. First Meeting of the IODE Steering Group for OceanDocs (SG-OceanDocs), 24–27 January 2012, Ostend, Belgium