

Intergovernmental Oceanographic Commission

Reports of Meetings of Experts and Equivalent Bodies

THE ad hoc ADVISORY GROUP FOR IOCARIBE-GOOS

First Session Caracas, Venezuela, 3-5 November 1999

Intergovernmental Oceanographic Commission *Reports of Meetings of Experts and Equivalent Bodies*

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IOCARIBE-GOOS-I/3 Paris, April 2000 Original: English*

^{*} Translated in Spanish

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1. OPENING

The Co-Chairs of the *ad hoc* Advisory Group for IOCARIBE-GOOS, Dr. Guillermo Garcia-Montero and Dr. Douglas Wilson opened the meeting at 09:15 hours, thanking all participants for their efforts to attend the meeting, kindly hosted by the Universidad de Oriente, Venezuela.

Dr. Gregorio Reyes Vasquez, International Cooperation Office of the Universidad de Oriente, welcomed the Group, wishing much success in its work.

Janice Trotte, GOOS Project Office, thanked, on behalf of IOC, the local organizer and in particular Ruben Aparicio, for hosting the meeting. She also noted that this was the first meeting of the *ad hoc* Advisory Group for "IOCARIBE-GOOS" mentioning that the acronym has replaced the original "Caribbean GOOS" according to the decision taken during the Sixth Session of the Subcomission for IOCARIBE.

2. ADMINISTRATIVE ARRANGEMENTS

Douglas Wilson, Chairman for the first day of the session, asked the technical secretary to present the administrative arrangements for the meeting under this agenda item.

Janice Trotte conveyed formal apologies from Alejandro Gutierrez (Costa Rica), that due to previous commitments was not able to attend this First Session. Yuri Chakallal (Barbados) notified the Group that he no longer holds his previous job position and therefore would lead for the discretion of his previous Institution to decide whether or not he should continue serving on the Group. Formal excuses have also been received from Rafael Steer-Ruiz, IOC Regional Office for IOCARIBE, that due to administrative constraints could not contribute to this Session. She finally mentioned that Dr. Patricio Bernal has sent a formal letter to Permanent Delegations of those countries from which participants to this *ad hoc* Advisory Group belong to, notifying IOC's decision to hold this meeting.

2.1 ADOPTION OF THE AGENDA

The provisional agenda (Annex I) was adopted by the participants with inclusion of Item 5. 4, Regional Scientific meetings of interest to IOCARIBE-GOOS.

2.2 DESIGNATION OF THE RAPPORTEUR

Hazel McShine was appointed to serve as Rapporteur of this Session.

2.3 CONDUCT OF THE SESSION, TIMETABLE AND DOCUMENTATION

Janice Trotte presented the working and information documents that were distributed and available to participants in advance. The main document was the draft Report of the IOCARIBE Users and the Global Ocean Observing System (GOOS) Capacity Building Workshop, held in San Jose, Costa Rica, 22-24 April 1999. She also mentioned the fact that the GOOS Publication No. 42, the GOOS Prospectus 1998, was now available on the Web (http://ioc.unesco.org/goos/prospe98).

3. OVERVIEW AND BACKGROUND INFORMATION

Guillermo Garcia-Montero stressed the importance of this First Session, as an immediate follow-up to the IOCARIBE Users and the Global Ocean Observing System (GOOS) Capacity Building Workshop. He mentioned the substantive amount of work charged to this Group, as one looks into the meeting's agenda, and stressed the important role of the Group in drafting the Terms of

Reference for setting up IOCARIBE-GOOS and design its Strategic Plan, among others. He also presented a paper entitled "Considerations on the Development of an Ocean and Coastal Observing System in the Caribbean and Gulf of Mexico", that has been prepared by him to be presented at a future meeting of the Intra-Americas Sea Initiative (IASI), for discussion during this Session.

The Group welcomed his paper that lays the ground of important issues to be addressed, while planning IOCARIBE-GOOS.

It was mentioned that the Marine Scientific Community and many governments in the region do not yet fully understand the concept of *Operational Oceanography* and therefore there is a need to make it broader in perspective as well as to address the benefits for participating in GOOS.

It was suggested that as an effort to help GOOS implementation in the region, the Executive Secretary of IOC could consider sending a letter to the Permanent Delegations of the Governments from the IOCARIBE-GOOS region, providing them with information on the System and indicating the benefits to participate in it.

Following with the meeting objectives and envisaged results, the following thoughts were advanced to the Group:

- i) the objectives of GOOS should be prefaced by the definition of IOCARIBE-GOOS. It can be envisaged as a major tool for sustainable development in the region;
- ii) long-term benefits should also be identified for the region. It was thought that a framework is needed to indicate how IOCARIBE-GOOS will deliver its products;
- there is a clear need for capacity building in the region as well as to identify the potential donor organizations that could contribute to that, both at the national and international level;
- iv) examples of end-to-end products that could mitigate impacts from natural hazards and anthropogenic processes should be sought. Those could be implemented as part of IOCARIBE-GOOS, with emphazis to the provision of information to the decision making process of Nationals;
- v) IOCARIBE-GOOS could be defined as a system to provide and support economic development through systematic observations in the open ocean and coastal areas;
- vi) IOCARIBE-GOOS should also be providing specific products and services on the past, present and future state of the marine environment that could potentially influence on climate in different time scales;
- vii) for the particular case of the Caribbean and the Gulf of Mexico, tourism, as an important economic activity, possesses qualities already demonstrated and even more promising due to its capacity to produce direct revenues and so contributing to the gross internal product of countries in the region. But tourism is at the same time an extremely sensitive and changing activity as a consequence of the influence of internal and/or external factors of political, economic and social characteristics. Tourism activities essentially depend on the quality of other resources and on the wisdom with which they have been managed, giving place to a healthy environment;
- viii) high quality weather forecasts is another issue of strategic importance to the region, not only because of the many economic impacts but also due to the recent natural disasters led by climatic events and that caused serious damage to society and economies of the region. GOOS is envisaged as essential to help predict and reduce the risks of human and economic losses due to climate events or associated marine disasters.

4. IMPLEMENTATION OF FOLLOW-UP ACTIONS FROM IOCARIBE USERS AND GOOS CAPACITY BUILDING WORKSHOP

4.1 REVIEW OF THE TERMS OF REFERENCE (TOR) FOR THE AD HOC IOCARIBE-GOOS ADVISORY GROUP

The Group recognized that its Terms of Reference (TOR) required some amendments so as to reflect its exact mission.

Additionally, it was also noted that the TOR version presented in the Report of the IOCARIBE Users and the Global Ocean Observing System (GOOS) Capacity Building Workshop, held in Costa Rica, and that has proposed its creation, was somehow different from the text presented during the Sixth Session of the IOCARIBE Subcommission, held shortly after that.

The Group then discussed those two texts and decided to propose the following Terms of Reference for its work, that reflect the understanding of what its mission should be:

- a) prepare an inventory of:
 - i) existing operational systems and programmes both at the international and national levels with relevance to IOCARIBE-GOOS;
 - ii) existing organizations with potential interest in IOCARIBE-GOOS;
 - iii) existing and proposed scientific programmes with expression to IOCARIBE-GOOS;
 - iv) existing services and products with potential interest to IOCARIBE-GOOS; and
 - v) commercial group with potential interests and involvement in IOCARIBE-GOOS.
- b) draft and distribute guidelines for national participation in IOCARIBE-GOOS which would include the setting up of a national GOOS Committee as a step;
- c) develop links with existing relevant organizations, programmes and projects in the region; and
- d) provide advice to the future Steering Committee on the preparation of a Strategic Plan, taking into account the existing elements of the GOOS Strategic Plan and Principles, as described in the GOOS Report No. 41 (IOC/INF-1091), with the specific adaptations to the region.

It was agreed that the IOCARIBE Officers would have to be informed of the amendments of those Terms of Reference made by the Group.

4.2 DRAFTING OF THE TERMS OF REFERENCE FOR THE IOCARIBE-GOOS STEERING COMMITTEE

The Group felt that the Terms of Reference for the Steering Committee could possibly be developed taking into account the information contained in Annex IV of the Report of the First Session of the GOOS Steering Committee (GOOS Report No. 57).

After a thorough discussion on the issue, the Terms of Reference for the IOCARIBE-GOOS Steering Committee were proposed, as follows:

The IOCARIBE-GOOS Steering Committee shall:

- a) be responsible for the establishment of IOCARIBE-GOOS;
- b) draft the IOCARIBE-GOOS Strategic Plan;
- c) draft the IOCARIBE-GOOS Implementation Plan;
- d) recommend technical and scientific activities to support the implementation of IOCARIBE-GOOS:
- e) provide oversight of the planning and implementation processes on the basis of the scientific and technical design of IOCARIBE-GOOS;
- f) establish the appropriate liaison with the IOCARIBE Subcomission, whenever appropriate, taking into account GOOS co-sponsor interests in the region;
- g) submit reports to the sponsoring organizations, to the IOCARIBE Subcommission and to I-GOOS, at appropriate times; and
- h) promote and disseminate the IOCARIBE-GOOS information to the potential users, especially governments.

The Group felt that the composition of members to the Steering Committee should be open to all Member States of IOCARIBE, who would be willing to join IOCARIBE-GOOS, hopefully at the implementation level, as well as representatives of GOOS co-sponsors and the IOCARIBE Secretariat.

The technical secretariat for the IOCARIBE-GOOS Steering Committee will be provided by the GOOS Project Office.

The Steering Committee for IOCARIBE-GOOS should report to the GOOS Steering Committee and work in tandem with the IOCARIBE Secretariat that should ultimately serve as a regional facilitator.

The Group discussed whether there should be a specific criteria for defining membership of the Steering Committee. There was also much discussion as to what the real meaning of the sentence "willing to join IOCARIBE-GOOS" was. The Group decided to go through informal consultation among themselves in the next intersessional period, so as to have it resolved.

4.3 REGIONAL REQUIREMENTS TO IMPLEMENT IOCARIBE-GOOS ACTIVITIES

The Group decided that it would be premature to discuss those requirements not having yet the inventory of activities, organizations, programmes, etc. that would lead such an analysis, as proposed to be an important activity of this Group.

4.4 REGIONAL INVENTORY ON EXISTING PROJECTS OR ACTIVITIES THAT COULD TURN INTO IOCARIBE-GOOS PILOT PROJECTS; MECHANISMS FOR IMPLEMENTATION

The Group recognized that this item would be object of a complete evaluation as part of their Action Plan for the years 2000/2001.

4.5 ACTION PLAN FOR THE 2000/2001 BIENNIUM AND DEFINITION OF TASKS FOR MEMBERS OF THE AD HOC ADVISORY GROUP

The Group decided to assign roles to its participants, according to a few actions required under Item 4.1 above, and that led to the following repertoire of actions and assignments:

- a) Definition of IOCARIBE GOOS: this will be drafted first by Guillermo Garcia, until 15 January 2000 and shall include background information and a rationale, so as to include priority application areas identified at the IOCARIBE-GOOS Workshop (Costa Rica), such as: tourism, fisheries, agriculture, coastal population, safety of maritime navigation, marine pollution, climate prediction, weather forecasting, natural hazard phenomena prediction (such as hurricanes, tsunamis, storm surges etc.) and marine biodiversity.
- b) Inventory of existing systems, programmes, etc.: this will be undertaken through a survey overseen by Mauricio Gonzalez, who will work with the IOCARIBE Secretariat, as deemed necessary. In consideration of the fact that the present Acting IOCARIBE Secretary will not be carrying out those duties by that time, it has been agreed that the IOC Secretariat in Paris should meet the running costs, if no replacement has come to post by then (January 2000).

The Group requests assistance from:

- (i) the GOOS Project Office, in providing the Group examples of other GOOS surveys already done elsewhere (*e.g.*, EuroGOOS), and preliminary information from the Costa Rica GOOS workshop; and
- (ii) the Regional Secretariat to provide a distribution list and the existing database of programmes, institutions, etc., and to serve as a distribution and return point for the survey.

The timetable for completion of the survey is as follows:

15 January 2000 Draft Survey distributed to AG members for comments;

15 – 20 January 2000 AG Revisions to Survey;

01 February 2000 Final draft of survey forwarded to Regional Secretariat for distribution

(or to the GOOS Project Office if IOCARIBE Secretariat position is

not filled by that time);

15 February 2000 Begin survey distribution; 15 May 2000 Survey return deadline; 15 May-15 June 2000 Compile Results.

4.6 INITIAL DISCUSSIONS ON THE PREPARATION OF THE IOCARIBE-GOOS STRATEGIC PLAN

The Group decided that a definition of a Strategic Plan was required. It was agreed that it should describe the principal elements that will define GOOS. It should also identify actions needed and how those might be implemented now and in the near future. For these purposes, it shall outline the vision, mission, objectives and goals of GOOS; the principles that underline the design and define the nature of involvement; the defined phases of planning and implementation; and the roles of the various planning and implementation bodies and the participants at the national level.

It was also agreed that the modules for IOCARIBE-GOOS should be (i) coastal; (ii) oceanic; and (iii) training. The Coastal module is likely to be the most important one to the region and capacity building activities are to be stressed.

The Group recommended that the Strategic Plan document should be published at least in two of the IOCARIBE official languages, namely English and Spanish.

The Group felt that it should be a good occasion to start discussing the elements that could be taken into account while drafting an IOCARIBE-GOOS Strategic Plan.

The Group finally decided that the title for the final report of its work should be called "The Case for IOCARIBE-GOOS". Such a document would contain the initial strategic plan and would indicate the elements that should be part of the Strategic Plan, including the focus on the regional users needs. It would be based on the format of the GOOS Report No. 41, with the actual content reflecting special considerations of its application to the IOCARIBE region. Responsibility for writing this document was distributed by chapters, as follows:

| 1. | The Definition of IOCARIBE – GOOS | Guillermo Garcia |
|----|-----------------------------------|---------------------|
| 2. | Assessment of Needs | Ruben Aparicio |
| 3. | The Design of IOCARIBE – GOOS | Doug Wilson |
| 4. | Implementation and Integration | Doug Wilson |
| 5. | GOOS Products | Alejandro Gutierrez |
| 6. | Data and Information Management | Doug Wilson |
| 7. | National and Regional Development | Hazel McShine |
| 8. | Training and Capacity Building | Alejandro Gutierrez |
| 9. | Technology Development | Doug Wilson |
| 10 | . Resources | Ruben Aparicio |
| 11 | . Ensuring Effective Coordination | Hazel McShine |

The first draft of this document should be exchanged among members by 15 April 2000.

The next meeting of the Group should consider the final draft of the document to be circulated by e-mail among its members.

5. FUTURE ACTIONS REQUIRED

5.1 COMPOSITION OF THE AD HOC ADVISORY GROUP AND DEFINITION OF TASKS FOR ITS MEMBERS

Based on the fact that Yuri Chakallal may not be in a position to serve as a member of this Group, some thoughts on the issue of how to substitute and formalize member's participation were exchanged. The Group decided that the Co-chairs should approach the IOCARIBE Focal Point in Barbados asking for the name of a substitute to Yuri Chakallal.

The principle and statutes for nominating new participants to the Group should be investigated, taking into account the specificities requested for this kind of work by the IOCARIBE Subcommission and the Intergovernmental Committee for GOOS, the two governing bodies for IOCARIBE-GOOS.

The Group felt that geographic representation should cover to the extent possible all the different geographical sub-groups in the IOCARIBE region. In that respect, the possibility of adding a representative from Mexico to its composition should be explored.

5.2 IASI MEETING IN PANAMA, 09-11 NOVEMBER 1999

The Group took note of the meeting and of the information provided by Doug Wilson in what refers to the objectives of the meeting.

It was decided that both Co-Chairs will be representing the Group during that meeting, that represents a good opportunity to discuss regional scientists needs and potential contributions from IOCARIBE-GOOS.

5.3 UNEP INTERGOVERNMENTAL MEETING (IGM) FOR THE CARIBBEAN SEA, KINGSTON, JAMAICA

The Group recognized the interest of being represented in this meeting, so as to start addressing IOCARIBE-GOOS interests and capacities to deliver important products to those Member States.

It was therefore decided that IOC Secretariat should consider the possibility of sending a representative of the *ad hoc* Advisory Group to the meeting, now postponed to February 2000.

5.4 REGIONAL SCIENTIFIC MEETINGS OF INTEREST TO IOCARIBE-GOOS

It was suggested that both the GOOS Project Office and the IOCARIBE Secretariat should keep this Group informed on the agenda of meetings of potential interest to IOCARIBE-GOOS.

It was mentioned that an IOCARIBE science meeting is scheduled to take place soon. It was recommended that a representative of the *ad hoc* Advisory Group for IOCARIBE-GOOS should attend that meeting.

5.5 PIRATA EXTENSION IN THE ATLANTIC

Janice Trotte gave a brief overview on this GOOS pilot project in the Tropical Atlantic and also provided the latest information concerning PIRATA possible expansions. In particular, she mentioned that there is a meeting planned to take place in Brazil, September 2000, to discuss the expansions of the western end of the array.

The Group was informed that Venezuela has been considering the possibility to join PIRATA soon, according to national interests and the resources yet to be put in place.

5.6 INVITATION TO HOLD AN IOCARIBE-GOOS WORKSHOP DURING OCEANOLOGY INTERNATIONAL – AMERICAS, MIAMI, 03-05 APRIL 2001

The Group has been informed that the Organizing Committee of that event has approached the Executive Secretary of IOC to propose having a GOOS Workshop on IOCARIBE-GOOS, coinciding with this technological trade fair, to be held in Miami, April 2001.

The Group agreed that the proposal should be given serious considerations, since the OI Technology Trade Show would coincide with the completion of the Group's assignment. The Group could use the meeting to reinforce the concept of IOCARIBE-GOOS to the potential users of oceanographic products and the potential members of the Steering Committee.

The OI presented a proposal with two options; the first one was to hold a workshop for invited delegates only; and the second one would be to call for a conference open to all visitors attending the OI Trade Show.

The Group suggested that there should be two activities for IOCARIBE-GOOS associated with the OI Trade Show, the first of those being the Third Session of the *ad hoc* Advisory Group. The second activity could be the First Conference on Ocean Observing Systems for the Caribbean and Gulf of Mexico (IOCARIBE-GOOS), a good opportunity to discuss operational oceanography in its broadest form.

The Group agreed that the IOC Secretariat should be asked to assist in terms of logistic support and financial assistance for those proposed events.

It was decided that the IOC Secretariat should report back to the organizer on the discussions held during this meeting and also that Doug Wilson should serve as the Group's focal point in charge of developing a work plan to meet the organizer's timetable for announcements, etc.

Additionally, Doug Wilson indicated he had submitted an abstract on the establishment of IOCARIBE-GOOS to the OI Meeting to be held in the United Kingdom in March 2000. He further indicated that the paper to be presented would have all the names of the members of the Group as coauthors, since it would include the deliberations of the Group at this meeting.

5.7 LIAISON WITH OTHER PROGRAMMES AND ORGANIZATIONS

The Group agreed that other organisations and programmes should be contacted and project leaders of projects with potential for operational oceanography should be approached.

With the results of the inventory in hand, the Group may decide as to which organisations, programmes and project leaders should be formally approached.

5.8 LINKS WITH OTHER OPERATIONAL PROGRAMMES

The Group decided that links are to be established with existing operational programmes relevant to IOCARIBE-GOOS, but also after the conclusion of the inventory.

6. FINAL DISCUSSION

6.1 ROLE OF NATIONAL COMMITTEES TO IOCARIBE-GOOS

It was noted that the GPO should try to collect information on what documents are available with information on guidelines to develop a national GOOS.

In particular, it was noted that a report coming from the PACSICOM Conference held in Africa last year contains valuable information to this Group on that respect.

It was agreed that Janice Trotte will send the available information to the members of the Group.

It was also agreed that the Co-Chairs will initiate the collection of existing National GOOS Committees in the Region. The list should also include the names of the leaders and members of the Committees. Those information would be sent to the IOCARIBE Secretariat for inclusion in their database on IOCARIBE Member States.

7. ADOPTION OF THE REPORT

The Report was approved by the Group with the amendments to be taken care by the IOCARIBE-GOOS technical secretariat.

8. OTHER BUSINESS

The Group felt that to the extent possible IOCARIBE-GOOS documents should be produced at least in two languages of the region (English and Spanish).

9. DATE AND PLACE FOR THE NEXT MEETING

The group accepted the offer of Guillermo Garcia to hold the Second Session of the *ad hoc* Advisory Group for IOCARIBE-GOOS in Havana, Cuba, prior to the meeting of the 5th Congress on Marine Sciences -"Marcuba 2000", to be held 19-23 June, 2000.

Financial support to participants shall be expected from IOC.

10. CLOSING

The Co-Chairs tanked the local organizers for hosting the meeting and for providing good hospitality. They also thanked the Group for the hard work carried out and declared the meeting adjourned at 1600 hours.

ANNEX I

AGENDA

WEDNESDAY 03 NOVEMBER 1999

| 0900 | 1. | OPENING AND WELCOME REMARKS |
|------|------|--|
| 0915 | 2. | ADMINISTRATIVE ARRANGEMENTS |
| | 2.1 | Adoption of the Agenda |
| | 2.2 | Designation of the Rapporteur |
| | 2.3 | Conduct of the session, timetable and documentation |
| 0930 | 3. | OVERVIEW AND BACKGROUND INFORMATION |
| | 3.1 | Meeting objectives and envisaged results |
| 1000 | COF | FEE BREAK |
| 1030 | 4. | IMPLEMENTATION OF FOLLOW-UP ACTIONS FROM THE IOCARIBE |
| | | USERS AND GOOS CAPACITY BUILDING WORKSHOP, Costa Rica, 22- |
| | | 24 April 1999 |
| | 4.1 | Review of the Terms of Reference (TOR) for the ad hoc IOCARIBE-GOOS |
| | | Advisory Group |
| | 4.2 | Drafting of the Terms of Reference (TOR) for the IOCARIBE-GOOS |
| | | Steering Committee |
| 1230 | LUN | CH BREAK |
| 1430 | 4.3 | Regional requirements to implement IOCARIBE-GOOS activities |
| | 4.4 | Regional inventory on existing projects or activities that could turn into |
| | | IOCARIBE-GOOS pilot projects; mechanisms for implementation |
| 1600 | COFI | FEE BREAK |
| 1630 | 4.5 | Definition of an Action Plan for the 2000/2001 biennium |
| | 4.6 | Initial discussions on the preparation of the IOCARIBE-GOOS Strategic Plan |
| 1800 | MEE' | TING ADJOURNS |
| | | |

THURSDAY 04 NOVEMBER 1999

| 0900 | 5. FUTURE ACTIONS REQUIRED 5.1 Definition of tasks for the members of the <i>ad hoc</i> Advisory Group 5.2 IASI Meeting in Panama, 08-11 November 1999 5.3 Intergovernmental Meeting (IGM) for the Caribbean Sea, Kingston, Jamaica, 06-10 December 1999 |
|------|---|
| 1020 | |
| 1030 | COFFEE BREAK |
| 1100 | 5.4 PIRATA extension in the Atlantic |
| | 5.5 Invitation to hold and IOCARIBE-GOOS Workshop during Oceanology |
| | International - Americas, Miami, 03-05 April 2001 |
| | 5.6 Liaison with other programmes and organizations |
| | 5.7 Links with other operational programmes relevant to IOCARIBE-GOOS |
| 1230 | LUNCH BREAK |
| 1430 | 6 FINAL DISCUSSION |
| | 6.1 The role of National Committees to IOCARIBE-GOOS |
| 1600 | COFFEE BREAK |
| 1630 | MEETING ADJOURNS (for participants to draft the Report) |

FRIDAY 05 NOVEMBER 1999

| 0900 | 7. | ADOPTION OF THE REPORT AND RECOMMENDATIONS FOR GOOS |
|------|------|---|
| | | GOVERNING BODIES |
| 1030 | COFF | FEE BREAK |
| 1100 | 8. | OTHER BUSINESS |
| | 9. | DATE AND PLACE FOR THE NEXT MEETING |
| | 10. | CLOSING OF THE SESSION |

ANNEX II

LIST OF DOCUMENTS

| Document Code | Title | Agenda Item |
|---|--|----------------|
| WORKING DOCUMENTS | | |
| IOCARIBE-GOOS | Provisional Agenda | |
| IOCARIBE-GOOS | Provisional List of Documents | |
| Workshop Report No. 158 (Draft) | The IOCARIBE Users and the Global Ocean Observing System (GOOS) Capacity Building Workshop, San Jose, 22-24 April 1999 | |
| INFORMATION DOCUMENTS | | |
| IOC Workshop Report No. 140 | IOC Workshop on GOOS Capacity Building for the Mediterranean Region, Valletta, 26-29 November 1997 | |
| IOC Workshop Report No. 144 GOOS Report No. 53 | IOC-SOPAC Workshop Report on Pacific Regional Global Ocean Observing Systems, Suva, 13-17 February 1998 | |
| IOC/SC-IOCARIBE-VI/3s | IOC-Sub-Commission for the Caribbean and Adjacent Regions (IOCARIBE), Sixth Session, San José, Costa Rica, 26-29 April 1999 | |
| IOC/INF-1091 GOOS Report No. 41 | Strategic Plan and Principles for the Global Ocean Observing System (GOOS), Version 1.0, January 1998 | |
| IOC-XX/3 prov. Annex II | Twentieth Session of the Assembly, Paris, 29 June-9 July 1999, Adopted Resolutions | |
| IOC-WMO-UNEP-ICSU/GSC-I/3 GOOS Report No. 57 | IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System, Paris, 20-23 April 1999 | |
| IOC-WMO-UNEP-ICSU/Impl-III/3 GOOS Report No. 65 | Implementation of Global Ocean Observations for GOOS/GCOS, Paris, 30 November 1998 | |
| http://ioc.unesco.org/goos/ prospe98/contents.html | GOOS Prospectus 1998 | |

ANNEX III

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ANNEX IV

LIST OF ACRONYMS

EuroGOOS European GOOS

GOOS Global Ocean Observing System (WMO-IOC-UNEP-ICSU)

GPO GOOS Project Office

IASI Intra-Americas Sea Initiative IGM UNEP-Intergovernmental Meeting

IOC Intergovernmental Oceanographic Commission (UNESCO)
IOCARIBE IOC Sub-commission for the Caribbean and Adjacent Regions

OI Oceanology International

PACSICOM Pan-African Conference on Sustainable Integrated Coastal Management

(Maputo, Mozambique, 18-25 July 1998)

PIRATA Pilot Research Moored Array in the Tropical Atlantic

TOR Terms of Reference

UNEP United Nations Environment Programme

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
- 2. Fourth Meeting of the Central Editorial Board for the Geological/Geophysical Atlases of the Atlantic and Pacific Oceans S. Fourth Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of 'El Niño' (Also printed in Spanish)
- 4. First Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
- 5. First Session of the IOC-UN(OETB) Guiding Group of Experts on the Programme of Ocean Science in Relation to Non-Living Resources
- 6. First Session of the Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
- 7. First Session of the Joint CCOP(SOPAC)-IOC Working Group on South Pacific Tectonics and Resources
- 8. First Session of the IODE Group of Experts on Marine Information Management
- 9. Tenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies in East Asian Tectonics and Resources
- 10. Sixth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
- 11. First Session of the IOC Consultative Group on Ocean Mapping (Also printed in French and Spanish)
- 12. Joint 100-WMO Meeting for Implementation of IGOSS XBT Ships-of-Opportunity Programmes
- 13. Second Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
- 14. Third Session of the Group of Experts on Format Development
- 15. Eleventh Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
- 16. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and Overlay Sheets
- 17. Seventh Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
- 18. Second Session of the IOC Group of Experts on Effects of Pollutants
- 19. 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)
- 20. Third Session of the Joint CCOP/SOPAC-IOC Working Group on South Pacific Tectonics and Resources
- 21. Twelfth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of South-East Asian Tectonics and Resources
- 22. Second Session of the IODE Group of Experts on Marine Information Management
- 23. First Session of the IOC Group of Experts on Marine Geology and Geophysics in the Western Pacific
- 24. 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)
- 25. Third Session of the IOC Group of Experts on Effects of Pollutants
- 26. Eighth Session of the IOC-UNEP Group of Experts on Methods, Standards and Intercalibration
- 27. Eleventh Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (Also printed in French)
- 28. Second Session of the IOC-FAO Guiding Group of Experts on the Programme of Ocean Science in Relation to Living Resources
- 29. First Session of the IOC-IAEA-UNEP Group of Experts on Standards and Reference Materials
- 30. First Session of the IOCARIBE Group of Experts on Recruitment in Tropical Coastal Demersal Communities (Also printed in Spanish)
- 31. Second IOC-WMO Meeting for Implementation of IGOSS XBT Ship-of-Opportunity Programmes
- 32. Thirteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asia Tectonics and Resources
- 33. Second Session of the IOC Task Team on the Global Sea-Level Observing System
- 34. Third 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 Effects of Pollutants
- 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. Fourteenth Session of the Joint CCOP-IOC Working Group on Post-IDOE Studies of East Asian Tectonics and Resources
- 41. Third Session of the IOC Consultative Group on Ocean Mapping
- 42. Sixth Session of the Joint IOC-WMO-CCPS Working Group on the Investigations of 'El Niño' (Also printed in Spanish)
- 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-UNEP Group of Experts on Methods, Standards and Intercalibration
- 46. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico
- 47. First Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
- 48. Twelfth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans
- 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
- $\textbf{52.} \ \ \textbf{Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean}$
- 53. First Session of the IOC Editorial Board for the International Chart of the Central Eastern Atlantic (Also printed in French)
- 54. Third Session of the IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (Also printed in Spanish)
- 55. Fifth Session of the IOC-UNEP-IMO Group of Experts on Effects of Pollutants
- 56. Second Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean
- 57. First Meeting of the IOC ad hoc Group of Experts on Ocean Mapping in the WESTPAC Area
- 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
- 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 IGOSS 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 IODE Group of Experts on Marine Information Management
- 76. Fifth Session of the IODE 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 IOG-WMO Meeting for Implementation of IGOSS 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 IODE 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 IODE 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-IGOSS-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 GEMSI 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 IOC 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 IOC-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 IODE 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 IGOSS 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)
- 116. 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 Off ices 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
- 118. Joint Scientific Technical Committee for Global Ocean Observing System (J-GOOS), Fourth Session, USA, 1997
- 199 First Session of the Joint 100-WMO IGOSS Ship-of-Opportunity Programme Implementation Panel, South Africa, 1997
- 120. Report of Ocean Climate Time-Series Workshop, Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate, USA, 1997
- 121. IOC/WESTPAC Co-ordinating Committee for the North-East Asian Regional Global Ocean Observing System (NEAR-GOOS), Second Session, Thailand, 1997

- 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 IODE 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
- 130. First Session of the IOC-WMO-UNEP-ICSU Steering Committee of the Global Ocean Observing System (GOOS), France, 1998
- 131. Fourth Session of the Health of the Oceans (HOTO) Panel of the Global Ocean Observing System (GOOS), Singapore, 1997
- 132. Sixteenth Session of the Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of the Oceans (GEBCO), United Kingdom, 1997
- 133. First Session of the IOC-WMO-UNEP-ICSU-FAO Living Marine Resources Panel of the Global Ocean Observing System (GOOS), France, 1998
- 134. Fourth Session of the IOC Editorial Board for the International Bathymetric Chart of the Western Indian Ocean (IOC/EB-IBCWIO-IW3), South Africa, 1997
- 135. Third Session of the Joint GCOS-GOOS-WCRP Ocean Observations Panel for Climate (OOPC), France, 1998
- 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
- 138. Implementation of Global Ocean Observations for GOOS/GCOS, Second Session, France, 1998
- 139. Second Session of the IOC-WMO-UNEP-ICSU Coastal Panel 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
- 141. Ninth Session of the Joint IOC-WMO-CPPS Working Group on the Investigations of 'El Niño', Ecuador, 1998 (Spanish only)
- 142. Seventh Session of the IOC Editorial Board for the International Bathymetric Chart of the Mediterranean and its Geological/Geophysical Series, Croatia, 1998
- 143. Seventh Session of the Tropical Atmosphere-Ocean Array (TAO) Implementation Panel, Abidjan, Côte d'Ivoire, 1998
- 144. Sixth Session of the IODE 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
- 148. Second Session of the IOC-WMO-UNEP-ICSU-FAO Living Marine Resources Panel of the Global Ocean Observing System (GOOS), France, 1999
- 149. Eighth Session of the Joint IOC-JGOFS CO2 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), Septima Reunión, Mexico, 1998 IOC Editorial Board for the International Bathymetric Chart of the Caribbean Sea and the Gulf of Mexico (IBCCA), Seventh Session, Mexico, 1998
- 155. Initial Global Ocean Observing System (GOOS) Commitments Meeting, IOC-WMO-UNEP-ICSU/Impl-III/3, France, 1999
- 156. First Session of the ad hoc Advisory Group for IOCARIBE-GOOS, Venezuela, 1999 (also printed in Spanish)