IOC-WMO-UNEP
Intergovernmental Committee for the Global Ocean Observing System (I-GOOS-X)

Tenth Session
20 June 2011
Paris, France

GOOS Report No. 189

UNESCO
IOC-WMO-UNEP Intergovernmental Committee of the Global Ocean Observing System (I-GOOS-X)

Tenth Session
20 June 2011
Paris, France
**ABSTRACT**

The 10th session of the Intergovernmental Committee for GOOS (Paris France, 20 June 2011) reviewed GOOS progress over the past biennium. The Committee discussed the Draft Resolution: Strengthening and Streamlining GOOS and recommended the Draft Resolution be presented to the 26th Session of the IOC Assembly. The Committee elected an I-GOOS Chairperson and Vice-Chairpersons to serve for the 2012-2013 biennium.

(SC-2011/……………………..
<table>
<thead>
<tr>
<th>TABLES OF CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>OPENING AND WELCOME</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ADMINISTRATIVE ARRANGEMENTS</td>
<td>1</td>
</tr>
<tr>
<td>1.1 ADOPTION OF THE AGENDA</td>
<td>1</td>
</tr>
<tr>
<td>1.2 DESIGNATION OF RAPPORTEUR</td>
<td>1</td>
</tr>
<tr>
<td>1.3 CONDUCT OF THE SESSION AND FORMATION OF WORKING GROUPS</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>REPORT OF THE I-GOOS CHAIRPERSON</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PREPARE DRAFT RESOLUTIONS FOR CONSIDERATION BY 26th ASSEMBLY</td>
<td>1</td>
</tr>
<tr>
<td>4.1 Programme of Work for GOOS 2012-13</td>
<td>2</td>
</tr>
<tr>
<td>4.2 Strengthening and Streamlining GOOS</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>DISCUSSION OF DRAFT RESOLUTIONS</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>ELECTIONS TO THE I-GOOS BOARD FOR 2011-2012</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>OTHER BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>7.1 ADOPTION OF ACTION ITEMS AND DECISIONS FOR INCLUSION IN THE REPORT OF THE 10th SESSION</td>
<td>3</td>
</tr>
<tr>
<td>7.2 ADOPTION OF THE I-GOOS 10th SESSION REPORT</td>
<td>3</td>
</tr>
<tr>
<td>7.3 NEXT SESSION OF I-GOOS (I-GOOS-XI)</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>CLOSURE OF THE SESSION</td>
<td>3</td>
</tr>
</tbody>
</table>
1 OPENING AND WELCOME

The Chair of I-GOOS, Shao Hua Lin, called the session to order at 9h30 on June 20, 2011. The Chairman welcomed the delegates and thanked them for their interest and efforts on behalf of the Global Ocean Observing System and the Intergovernmental Oceanographic Commission. In the afternoon the Chair welcomed the Executive Secretary of the IOC, Dr. Wendy Watson-Wright. Dr Wright thanked the I-GOOS delegations for their sincere efforts. Dr. Wright reported that the work toward a new GOOS governance is one of the most important issues of this year's IOC Assembly.

2 ADMINISTRATIVE ARRANGEMENTS

1.1 ADOPTION OF THE AGENDA

Committee changed the title of agenda item 5 from “Approval of Draft Resolution “ to “Discussion of Draft Resolution”. The Committee then adopted the Revised Provisional Agenda as the Agenda of the X Session; it is given in Annex I.

1.2 DESIGNATION OF RAPPORTEUR

The Committee did not designate a member state for Rapporteur. The Chair appointed the secretariat to fulfill the Rapporteur obligations for the session, under IOC Rule of Procedure No. 25(3).

1.3 CONDUCT OF THE SESSION AND FORMATION OF WORKING GROUPS

The Committee decided to form a sessional Nominations Committee to oversee the election of the new officers of I-GOOS. Hans Dahlin (Sweden) was nominated and seconded, and agreed to serve as Chairperson of the Nominations Committee. The Chair of I-GOOS then reopened nominations in order to encourage regions which had not yet proposed a nominee, Electoral groups III and V (South America and Africa).

The Chair decided to not form a sessional Resolutions Committee to oversee the drafting of resolutions. The drafting of the resolutions would be done during plenary itself (Section 4)

3 REPORT OF THE I-GOOS CHAIRPERSON

The Chair of the I-GOOS, Shao Hua Lin, gave an account of the action carried out over the last two years by the I-GOOS Board, which was officially established by the Assembly of the IOC at its 23rd session in 2005.

The Chair provided a review of the actions of the I-GOOS Board and IOC Executive Committee which led to the drafting of the Streamlining and Strengthening GOOS draft resolution. The importance of the need for the new governance structure was emphasized. The I-GOOS Board’s proposal seeks to strengthen the engagement of member states in the governance of GOOS by streamlining the governance structure and providing stronger interaction with ocean observation programmes and GOOS sponsors. The Draft Resolution identifies the IOC Assembly as the primary governing body of GOOS. In the proposed new governance structure a GOOS Steering Committee would include regional membership from IOC member states, ex-officio members from technical subcommittees, representatives of GOOS co-sponsors as well as would include scientific experts representing other ocean observation components.

4 PREPARE DRAFT RESOLUTIONS FOR CONSIDERATION BY 26th ASSEMBLY
4.1 Programme of Work for GOOS 2012-13

The session did not address this agenda item.

4.2 Strengthening and Streamlining GOOS

The I-GOOS Chair opened the floor to discussion of the issues of the draft resolution presented by the I-GOOS Board.

Member states questioned the exclusion of other sponsors of GOOS and suggested that IOC be the lead sponsor, while retaining the other current sponsors.

The member states discussed and edited the Draft Resolution "line by line."

5 DISCUSSION OF DRAFT RESOLUTIONS

I-GOOS decided to table the revised Draft Resolution on Strengthening and Streamlining GOOS as a basis for discussion at the IOC 26th Assembly. The Draft Resolution is included in Annex IV.

Decision 1. I-GOOS decided to recommend the Draft Resolution on Strengthening and Streamlining GOOS to the IOC 26th Assembly on the understanding that further drafting work would be carried out by a sessional working group of the Assembly. The final eight paragraphs of the draft resolution were left bracketed to be finalized during the assembly. Australia offered to take responsibility for improving the preambular text of the Draft Resolution prior to submission to the IOC Assembly.

6 ELECTIONS TO THE I-GOOS BOARD FOR 2011-2012

A nominations committee was formed at the start of the I-GOOS X session on Monday 20 June 2011. The committee was chaired by Dr Hans Dahlin (Sweden).

In accordance with the Terms of Reference for the I-GOOS set out in resolution 5 of the 23rd IOC Assembly, the board of I-GOOS consists of one Chair and four Vice Chairs.

The Nominations Committee had received seven nominations for the board. They were:

- Dr Shao Lin (Republic of China) for Chair [Electoral Group IV]
- Electoral Group I 
  Dr Margarita Greg (USA) for vice chair 
  Dr Nadia Pinardi (Italy) for vice chair 
  Dr Ralph Rayner (UK) for vice chair 

- Electoral Group II 
  Dr Alexander Postnov (Russian Federation) for vice chair 

- Electoral Group III 
  Captain Frederico Antonio Sardiva Nogueira (Brazil) for vice chair
Electoral Group V
Dr Ashly Johnson (South Africa)

The nominations received were deemed valid and in accordance with the rules of procedure.

Subsequently Italy withdrew the candidature of Nadia Pinardi.

Furthermore the countries which had nominated Dr. Ralph Rayner withdrew their secondment and his nomination was deemed no longer valid.

Consequently Dr Shao Lin was elected as chair by acclamation.

Furthermore Dr Greg, Dr Postnov, Captain Nogueira and Dr Johnson were elected by acclamation as vice-chairs.

**Decision 2** Dr. Shao Hua LIN (China) was elected for a second term as Chair of I-GOOS by acclamation. Dr. Margarita CONKRIGHT GREGG (United States of America) and Dr. Alexander POSTNOV (Russia) were elected for second terms as Vice-Chairs of I-GOOS by acclamation. Prof. Dr. Ashley JOHNSON (South Africa), and Capt. Nogueira (Brazil) were elected to first terms as Vice-Chairs of I-GOOS by acclamation.

7 OTHER BUSINESS

7.1 ADOPTION OF ACTION ITEMS AND DECISIONS FOR INCLUSION IN THE REPORT OF THE 10TH SESSION

The Committee considered the Secretariat’s Summary of Decisions of the present session. The Committee accepted the Decisions for inclusion in the Report.

7.2 ADOPTION OF THE I-GOOS 10TH SESSION REPORT

The Secretariat was instructed to post the I-GOOS 10th Session Report to the GOOS web site as soon as possible.

7.3 NEXT SESSION OF I-GOOS (I-GOOS-XI)

The Committee agreed that scheduling the next session of the I-GOOS would not be necessary at this time, pending potential the reorganization of the GOOS.

8 CLOSURE OF THE SESSION

The Chairperson closed the 10th Session of I-GOOS at 17:50 Monday 20th June 2011.
ANNEX I

AGENDA

1 OPENING AND WELCOME

2 ADMINISTRATIVE ARRANGEMENTS

1.1 ADOPTION OF THE AGENDA

1.2 DESIGNATION OF RAPPORTEUR

1.3 CONDUCT OF THE SESSION AND FORMATION OF WORKING GROUPS

3 REPORT OF THE I-GOOS CHAIRPERSON

4 PREPARE DRAFT RESOLUTIONS FOR CONSIDERATION BY 26th ASSEMBLY

4.1 Programme of Work for GOOS 2012-13

4.2 Strengthening and Streamlining GOOS

5 DISCUSSION OF DRAFT RESOLUTIONS

6 ELECTIONS TO THE I-GOOS BOARD FOR 2011-2012

7 OTHER BUSINESS

7.1 ADOPTION OF ACTION ITEMS AND DECISIONS FOR INCLUSION IN THE REPORT OF THE 10TH SESSION

7.2 ADOPTION OF THE I-GOOS 10TH SESSION REPORT

7.3 NEXT SESSION OF I-GOOS (I-GOOS-XI)

8 CLOSURE OF THE SESSION
ANNEX II
LIST OF ACTIONS AND DECISIONS

Decision 1. I-Goos decided to recommend the Draft Resolution on Strengthening and Streamlining GOOS to the IOC 26th Assembly on the understanding that further drafting work would be carried out by a sessional working group of the Assembly. The final eight paragraphs of the draft resolution were left bracketed to be finalized during the assembly. Australia offered to take responsibility for improving the preambular text of the Draft Resolution prior to submission to the IOC Assembly.

Decision 2 Dr. Shao Hua LIN (China) was elected for a second term as Chair of I-Goos by acclamation. Dr. Margarita CONKRIGHT GREGG (United States of America) and Dr. Alexander POSTNOV (Russia) were elected for second terms as Vice-Chairs of I-Goos by acclamation. Prof. Dr. Ashley JOHNSON (South Africa), and Capt. Nogueira (Brazil) were elected to first terms as Vice-Chairs of I-Goos by acclamation.
ANNEX III

DRAFT RESOLUTION IOC-XXVI

Submitted by: …
Agenda item: 6.1

PROGRAM OF ACTION FOR GOOS 2012-2013

The Intergovernmental Oceanographic Commission,

Recalling:
   i. Resolution XVI-8 establishing the Global Ocean Observing System (GOOS)
   ii. Resolution XXV-12 describing the programme of action for GOOS 2010-2011,

Noting:
   i. The Global Ocean Observing System (GOOS) is a priority for the IOC;
   ii. The accompanying Resolution of this 26th Assembly on Strengthening and Streamlining GOOS
   iii. The reports on the level of implementation of GOOS to the UN Framework Convention on Climate Change (Cancun, 2010) and Convention on Biological Diversity (Nagaoya, 2010)
   iv. Paragraph 36 of the Johannesburg Plan of Implementation (World Summit on Sustainable Development 2002) which called for expanded observation of the global ocean and coastal seas.

Considering:
   i. That progress in the implementation of the sustained GOOS climate module remains plateaued at just over 60% of its design goal.
   ii. That, while climate monitoring and forecasts remain the main drivers for GOOS, the system must be developed to address other applications and societal needs,
   iii. The need to increase the degree of Member State engagement in GOOS implementation,

Anticipating:
   i. The importance of sustained oceanographic observations to the planned development of a global framework for climate services;
   ii. The future continued importance of the United Nations Framework Convention on Climate Change and Convention on Biological Diversity as platforms for enhancing GOOS visibility and ensuring Member State participation in sustaining the GOOS;

Having Considered:
   i. The Draft Executive Summary Report from I-GOOS-IX (IOC/I-GOOS-X/3s) and the related report by the I-GOOS Chair to the 26th Assembly
ii. The Integrated Framework for Sustained Ocean Observing —Report of the post-OceanObs'09 Conference Working Group (IOC/Inf-1284) and the report by the co-Chair of the post-OceanObs'09 Conference Working Group to the 26th Assembly.

Decides to focus the GOOS program of work for the 2012-2013 biennium on (1) sustaining the climate component of GOOS in support of the UN Framework Convention on Climate Change (2) Implementing GOOS in coastal areas including through GOOS national programs and Regional Alliances, (3) Developing and sustaining biological and biogeochemical components of GOOS in support of the Convention on Biodiversity and in the context of RIO+20 and (4) Implementing GOOS in the context of the Integrated Framework for Sustained Ocean Observing, as follows:

1. Sustaining the climate module of GOOS

Urge Member States to ensure ocean observations and information products underpin national efforts to deliver climate services within the global framework for climate services.

Request that the Executive Secretary prioritize continued visibility of GOOS in service of the needs of the United Nations Framework Convention on Climate Change Conference of Parties (COP) and its subsidiary body for scientific and technical advice (SBSTA).

2. Implementing GOOS in coastal areas

Urge Member States to:

i. Strengthen the implementation of GOOS in support of coastal zone management and sustainable development, and

ii. Implement national observing programs in their coastal areas with an eye to developing synergies through regional and global coordination and cooperation.

3. Developing and Sustaining biological and biogeochemical components of GOOS

Urge Member States to commit to monitoring biogeochemical and biological essential ocean variables in sustained, systematic and internationally coordinated manner within the framework of GOOS.

Request that the IOC Executive Secretary:

i. Prioritize capacity-building activities that will assist developing countries in deriving benefits from the, biological and biogeochemical components of GOOS, developing strategies for reducing coastal erosion, providing regional centre in charge of oceanography with appropriate equipment, developing projects with practical outcomes, assisting each coastal country to monitor its own sea resources.

ii. Strengthen cooperation with the biological and biogeochemical oceanographic research communities and organizations, including the UN Convention on Biological Diversity.

iii. Advocate for GOOS as the IOC contribution to the Regular Process for Global Reporting and Assessment of the Marine Environment.

4. Implementing the Framework for Ocean Observations
**Request** that the IOC Executive Secretary **ensure** GOOS takes a leading role in sustained global ocean observations over the next decade as the newly developed Framework for Ocean Observations takes shape, including by **increasing** the regular budget and staff resources dedicated to GOOS by IOC.

**Invites** partner organizations to embrace the Framework for Ocean Observations and work within it to sustain the global ocean observing system.
ANNEX III

DRAFT RESOLUTION IOC-XXVI

Submitted by …

[edited by I-GOOS-X, 20 June 2011; consensus text, except for text in parentheses]

[preface edited by Australia at the request of I-GOOS, 21 June 2011]

Agenda item 6.1

STRENGTHENING AND STREAMLINING GOOS

The Intergovernmental Oceanographic Commission,

1  Recalling:
   (i) IOC Resolution XVI-8 establishing the Global Ocean Observing System (GOOS)

2  Noting:
   (i) The progress in the implementation of the GOOS Climate module as reported to the UN Framework Convention on Climate Change at Cancun, December, 2010 (GOOS report No.184),
   (ii) The success of the OceanObs09 conference (Venice, 2009) and the Framework for Ocean Observations developed by the task team (IOC/INF-1284)
   (iii) Paragraph 36 of the Johannesburg Plan of Implementation (World Summit on Sustainable Development 2002) which called for expanded observation of the global ocean and coastal seas, and the planned assessment of the progress to date and the remaining gaps in sustainable development and the implication for oceans at Rio+20 in Brazil in 2012,

Reaffirming that the Global Ocean Observing System (GOOS) is a priority for the IOC

3  Considering:
   (i) That observations of the oceans are critical to understanding and forecasting the global climate system and climate change,
   (ii) The importance of systematic ocean observations to ensure that the Convention on Biodiversity (Nagoya, 2010) target of 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, can be conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas.
(iii) The importance of sustained oceanographic observations to global climate monitoring, research and prediction, as well as to the planned future improved delivery of climate services (latest reference on GFCS here),
(iv) That sustained observations are critical to manage ocean biodiversity and ecosystems, as well as to global monitoring and assessment of ocean carbon, ocean acidification and the marine environment generally.
(v) The need to increase the number of IOC Member States active in GOOS implementation, and to develop their capacity to participate in and benefit from GOOS

Considering further:
(i) The formation in 1999 of JCOMM as a mechanism for coordinating ocean observation activities with WMO
(ii) That UNEP, in particular its Regional Seas Programs, is a priority user for GOOS observations, products and services
(iii) That the Memorandum of Understanding laying out the cosponsorship of GOOS signed in 1998 was in place for five years and is no longer valid
(iv) That engagement of the Oceanographic research community in development of GOOS can benefit from cooperation with the International Council for Science (ICSU)
(v) That the GOOS Regional Alliances and the IOC Regional Subsidiary Bodies are important mechanisms for GOOS implementation

Recognizing the need to broaden the scientific remit of GOOS and to simplify its governance,

4  Having Considered the summary report from I-GOOS-X (Paris, June 2011) and the presentation to the 26th Assembly by the Chairperson of I-GOOS,

5  Decides to
1. Recommit to GOOS, building on existing achievements, by
   (i) Focusing on GOOS as a holistic system encompassing global, regional and coastal observations and products
   (ii) Integrating both research and operational observations within GOOS.
   (iii) Aligning GOOS with an essential ocean variable oriented framework for ocean data and products
   (iv) Promoting GOOS’ essential role in providing observations and products for global and regional conventions such as UNFCCC, including its emphasis on adaptation, (including data
for) consideration of natural hazards, the Convention on Biological Diversity, Regional Seas as well as the UN Regular Process for Assessment of the Marine Environment.

(v) **Reinforcing** global participation through capacity development, especially in Africa, SIDS and LDCs.

2. Streamline and strengthen the governance of GOOS by

(i) **Reconfirming** IOC as lead sponsor responsible for GOOS, in cooperation with cosponsoring organizations: WMO, UNEP, and ICSU, which contribute to and/or benefit from GOOS, and other committed organizations.

(ii) **Dissolving** I-GOOS, the GSSC, and its subsidiary panels, thereby making the IOC Assembly through appropriate arrangements directly responsible for governance of GOOS, and ensuring GOOS expertise is on the delegation,

(iii) **Creating** the GOOS Steering Committee as an advisory body to the Assembly (TOR appended). The GOOS Steering Committee shall come into effect 1 January 2012.

(iv) **Reinforcing** the cooperation of the IOC Regional Subsidiary Bodies, and the GOOS Regional Alliances (GRAs) as a means for coordination, implementation and sharing of best practices.

(v) **Adopting** the terms of reference for the GOOS Steering Committee appended to this resolution.

(vi) **Requesting** the Executive Secretary to ensure adequate support for the GOOS Steering Committee
Terms of Reference for the GOOS Steering Committee (Group of Experts)

Acting under the guidance and governance of the Intergovernmental Oceanographic Commission Assembly, and with the active participation and support of Member States, the GOOS Steering Committee will carry out intersessional activities to:

(i) identify the essential ocean variables to observe, and develop and update as necessary the scientific, technical and implementation plans and targets for GOOS, for approval of the IOC Assembly and partners;
(ii) monitor, promote, and provide guidance on the implementation of GOOS in accordance with agreed implementation plans;
(iii) regularly assess the performance of GOOS in providing users with fit-for-purpose data and information products;
(iv) identify and encourage research and operational programmes to augment and improve GOOS;
(v) assist in developing the capacity of all Member States to participate in and benefit from GOOS;

The GOOS Steering Committee will produce a biennual Work Plan for consideration and adoption by the IOC Assembly and partner organizations. This Workplan will clearly identify dedicated resources and commitments necessary for each Workplan elements. In executing the elements of the plan endorsed and resourced by the Assembly, and/or extrabudgetary sources, the GOOS Steering Committee will be supported by the dedicated resources of a GOOS Project Office.

The GOOS Steering Committee will have the authority to create and dissolve time limited panels according to the IOC rules of procedure within limits of resources available.

(The board will be comprised of up to 15 members.
Five members with relevant expertise will be appointed by Member State Electoral Groups during the IOC Assembly, one from each IOC electoral group.
The Executive Secretary in consultation with Partners shall appoint additional scientific experts. The board can propose members for consideration including its chair.
Chairs of subsidiary panels of the board will serve as ex-officio members.
Members can serve up to two consecutive terms. Members can not be replaced during their term of appointment.
The Executive Secretary will appoint the chair of the board, in consultation with the IOC officers.
The GOOS Board may invite those observers it deems necessary.
The GOOS Board shall meet frequently and regularly at least annually. The Board may define an executive committee to be selected from amongst its membership which may meet frequently by tele- or video-conference.)
I. I-GOOS BOARD

I-GOOS Chairperson

Prof Shao Hua LIN
I-GOOS Vice-Chair
Honourable Director-General
National Marine data and Information Service of China (NMDIS/SOA/China)
93 Tianjin City, Liu Wei Rd
P.O. Box 74
Hedong District, 300171 Tianjin
China
Tel: (86) 22 2401 0803
Fax: (86) 22 24 01 09026
Email: shlin@mail.nmdis.gov.cn
(also representing China)

I-GOOS Vice-Chairpersons

Prof Kouadio AFFIAN
Director of CURAT
Université de Cocody Abidjan, Centre
Universitaire de Recherche et d'Application en Télédétection
22 BP 582 Abidjan 22
Cote D'Ivoire
Tel: +225 22 44 52 70
Fax: +225 22 44 52 70
Email: k_affian@yahoo.fr

Dr. Margarita GREGG
Director
1315 East West Highway Silver Spring, MD 20910
United States
Tel: +1 301-713-3270
Fax: +1 301-713-3300
Email: Margarita.Gregg@noaa.gov

Dr Alexander POSTNOV
Deputy Director
State Oceanographic Institute
Russian Federation Service for Hydrometeorology & Environmental Monitoring
6, Kropotkinsky Per.
Moscow 110034
Russian federation
Tel: 8 499 246 01 67
Fax: 8 499 246 72 88

GPO Director

Dr Keith ALVERSON
Director, Global Ocean Observing System
Head of Section, IOC/UNESCO
1 rue Miollis
75732 Paris Cedex 15
France
Tel: (33 1) 45 68 40 42
Fax: (33 1) 45 68 58 13
Email: k.alverson@unesco.org

II. PARTICIPANTS FROM MEMBER STATES

AUSTRALIA

Dr Peter Dexter
Co-president of JCOMM
Ocean Services Section
Bureau of Meteorology
GPO Box 1289
Melbourne, VIC, 3001
Australia
Tel: (61 3) 9669 4870;
Fax: (61 3) 9669 4725
Mobile: (61 (0)417 353 459
Email: p.dexter@bom.gov.au
(also representing JCOMM)

BELGIUM

Dr. Georges PICHOT
Management Unit of the North Sea Mathematical Models
Gulledelle, 100
B-1200 Brussels
Belgium
Tel: (32) 2 773 21 22
Fax: (32) 2 770 69 72
Email: G.Pichot@mumm.ac.be
BRAZIL

Capt. (Ret) Frederico Antonio SARAIVA NOGUEIRA
GOOS Rio
Brazilian Navy Hydrographic Center, Directorate of Hydrography and Navigation
R. Barão Jaceguai s/n
Niterói, Rio de janeiro
CEP 24048-900
Brazil
Tel: +55 (21) 2189 3380
Email: frederico@dhn.mar.mil.br

Ms Janice TROTTE-DUHÁ
Head, IOC Rio de Janeiro Regional Office
Directorate of Hydrography and Navigation
Brazil
Tel: +55 21 2189 3013
Fax: +55 21 2189 3088

VAdm Luiz Fernando PALMER FONSECA
Director
Diretoria de Hidrografia e Navegação
Rua Barão de Jaceguay s/no
Ponta da Armação
Niterói - Rio de Janeiro
24048-900
Brazil
Email: palmer@dhn.mar.mil.br

BULGARIA

Dr Atanas PALAZOV
Director
Institute of Oceanology, Bulgarian Academy of Sciences, Varna
P.O.Box 152, Varna 9000
Bulgaria
Tel: +359 52 370 484
Fax: +359 52 370 483
Email: palazov@io-bas.bg

CANADA

Ms Helen JOSEPH
Director
Fisheries and Oceans Canada, Canadian Hydrographic Service
Canada
Tel: 1 (613) 990-6930
Fax: 1 (613) 990-6131
Email: Helen.Joseph@dfo-mpo.gc.ca

CHINA (Republic of)

Ms Shao Hua LIN
(I-GOOS Chair)

Dr Fengying JI
Senior Engineer, Marine Data Center
National Marine Data and Information Service
No. 93, Liuwei Road
300171 Tainjin
Hedong District
China
Tel: +86 22 24010834
Fax: +86 22 24010926
Email: jfywork@yahoo.com.cn

CÔTE D'IVOIRE

Prof Kouadio AFFIAN
(I-GOOS Vice-Chair)

EGYPT

Prof. Mohamed Ahmed SAID
Prof. National Institute of Oceanography & Fisheries (NIOF)
8 Dr. Abdel-Hamid Abo Haif, El-Shatby Alexandria
21111 Alexandria
Egypt
Tel: +20123779117
Fax: +2034801174
Email: mamsaid2@hotmail.com

FRANCE

Mr François GÉRARD
Member of the Board
French Association for Disaster Risk Reduction (AFPCN)
7, avenue Antoine Watteau
94420 Le Plessis-Trâves
France
Tel: +33 6 8437 3857
Email: frangerare@gmail.com

GERMANY

Sonja DORENDORF
Bundesamt fuer Seeschifffahrt und Hydrographie
(Federal Maritime and Hydrographic Agency)
Bernhard-Nocht Straße 78
20359 Hamburg
Germany
Email: german_ioc_section@gmx.net
GREECE
Dr Konstantinos A. NITTIS
Hellenic Center for Marine research
Institute of Oceanography
46.7 km Athens-Sounion Av.
PO Box 712, Anavyssos, Attica
GR 190-13
Greece
Tel: 30.22190 76400
Fax: 30.22910 76323
Email: knittis@ath.hcmr.gr
knittis@gmail.com

ITALY
Dr Giuseppe M. R. MANZELLA
ENEA Centro Ricerche Ambiente Marino S. Teresa
ENEA Centro Ricerche Ambiente Marino S. Teresa
19036 Lerici
Italy
Tel: +39 0187 978215
Fax: +39 0187 978213
Email: giuseppe.manzella@enea.it

Severo MASTROMARDI
Italy
Email: s.mastronardi.it@unesco-delegations.org

Dr. Nadia PINARDI
Professor
Istituto Nazionale di Geofisica e Vulcanologia
Bologna
Italy
Tel: +39 051- 3782633
Fax: +39 051- 3782654
Email: n.pinardi@sincem.unibo.it

JAPAN
Chihiro BABA
Japan Agency for Marine-Earth Science and Technology, Yokosuka
2-15 Natsushima
Yokosuka
237-0061
Kanagawa
Japan
Tel: +46 867 9227
Email: babac@jamstec.go.jp

Akeshi KAWANO
Japan
Email: kawanot@jamstec.go.jp

Dr. Kazuhiro KITAZAWA
Special Assistant to the Minister
Japan Agency for Marine-Earth Science and Technology, Yokosuka
Japan Agency for Marine-Earth Science and Technology (JAMSTEC) 2-15 Natsushima-cho
Yokosuka
237-0061
Japan
Tel: +81 46 867 91 91
Fax: +81 46 867 91 95
Email: kitazawa@jamstec.go.jp

Osamu MIYAKI
Administrative Staff
Japan Agency for Marine-Earth Science and Technology, Yokosuka
International Affairs Divisions, Planning Department
Japan
Email: miyakio@jamstec.go.jp

NORWAY
Henning WEHDE
Norway
Email: henning.wehde@niva.no

PORTUGAL
Ms Teresa SALADO
Delegation permanente auprès de l’UNESCO
Portugal
Email: t.salado@unesco.org

Prof Mario RUIVO
Portuguese Committee for IOC
Av. Infante Santo - 42/4th Floor
1350 Lisbon
Portugal
Email: cointersec.presid@fct.mctes.pt

RUSSIAN FEDERATION
Alexander KALASHNIKOV
Russian Federation
Email: polmar@mcc.mecom.ru

Dr Alexander POSTNOV
(I-GOOS Vice-Chair)
SOUTH AFRICA

Mr Mthuthuzeli GULEKANA
Scientist
Department of Environmental Affairs and Tourism, Marine and Coastal Management
P.O. Box X2
Roggebaai
Cape Town
8012
South Africa
Tel: +27(0) 21 4023136
Fax: +27(0) 21 425 6976
Email: mgulekan@deat.gov.za

Ashley JOHNSON
Department of Environmental Affairs and Tourism, Marine and Coastal Management
P.O. Box X2
Roggebaai
Cape Town
8012
South Africa
Tel: +27 21 402-3306
Fax: +27 21 425-6976
Email: ajohnson@environment.gov.za

SWEDEN

Mr Hans DAHLIN
EuroGOOS Director
Swedish Meteorological and Hydrological Institute
Folkborgsvägen 1
SE-601 76 Norrköping
Sweden
Tel: (46 11) 495 80 00
Fax: (46 11) 495 80 01
Email: hans.dahlin@smhi.se
(also representing GRC)

UNITED KINGDOM

Dr Trevor GUYMER
National Oceanography Centre, Southampton
European Way, Southampton
SO14 3ZH
United Kingdom
Tel: (44 23) 8059 6789
Fax: (44 23) 8059 6204
Email: jacomst@noc.soton.ac.uk

Dr John TURTON
Marine Observations
The Met Office
FitzRoy Road, Exeter
EX1 3PB
United Kingdom
Tel: 44 1392 886647
Fax: 44 1392 885681
Email: jon.turton@metoffice.com

UNITED STATES OF AMERICA

Dr. Margarita GREGG
(I-GOOS Vice-Chair)

Dr Stephen R. PIOTROWICZ
Deputy Director
National Oceanic & Atmospheric Administration
1305 East West Hwy. Silver Spring, MD, USA 20910
United States
Tel: (1 703) 588 0850
Email: Steve.Piotrowicz@noaa.gov

III. OBSERVERS

Salim ALHAJRI
Oman
Email: hajri13@yahoo.com

Mr Arthur PATERSON
Deputy Director
National Ocean Service/National Oceanic and Atmospheric Administration
International Program Office
Rm 5641 SSMC 3
1315 East West Highway
Silver Spring, MD 20910
United States
Tel: +1 301 713 3078 - 217
Fax: +1 301-713-4263
Email: arthur.e.paterson@noaa.gov

Dr. Sophie SEEYAVE
Partnership for Observations of the Global Oceans
Plymouth Marine Laboratory
Prospect Place, The Hoe
Plymouth
PL1 3DH
United Kingdom
Email: ssve@pml.ac.uk
IV. SECRETARIAT

Intergovernmental Oceanographic Commission (IOC) of UNESCO
1, rue Miollis
75732 Paris Cedex 15
France
Tel: (33) (0)1 45 68 39 84
Fax: (33) (0)1 45 68 58 10

IOC Officers

Prof Chérif SAMMARI
Institut National des Sciences et Technologies de la Mer, Salambo
Directeur du laboratoire du Milieu marin
Institut national des Sciences et Technologies de la Mer
28 rue 2 mars 1934
2025 Salammbó-Tunis
Tunisia
Tel: +216 1 730420
Fax: +216 1 732622
Email: Cherif.sammari@instm.rnrt.tn

STAFF AT HEADQUARTERS

GOOS Project Office
Fax:(33-1) 45 68 58 13/12

Dr Keith ALVERSON
Tel: (33) (0)1 45 68 40 42
Email: k.alerson@unesco.org

Dr Thorkild AARUP
Tel: (33) (0)1 45 68 40 19
Email: t.aarup@unesco.org

Dr Justin AHANHANZO
Tel: (33) (0)1 45 68 36 41
Email: j.ahanhanzo@unesco.org

Dr Albert FISCHER
Tel: (33) (0)1 45 68 40
Email: a.fischer@unesco.org

Dr Thomas GROSS
Tel: (33) (0)1 45 68 39 92
Email: t.gross@unesco.org

Secretariat GOOS Project Office

Ms Forest COLLINS
Tel: (33) (0)1 45 68 39 74
Email: f.collins@unesco.org

Ms Simonetta HAOND
Tel: (33) (0)1 45 68 39 76
Email: s.haond@unesco.org
# ANNEX V

## LIST OF DOCUMENTS*

<table>
<thead>
<tr>
<th>Document Code</th>
<th>Title</th>
<th>Responsible</th>
<th>Agenda item</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-GOOS-X/1</td>
<td>I-GOOS-X Provisional Agenda and Timetable</td>
<td>Secretariat</td>
<td>All</td>
</tr>
<tr>
<td>I-GOOS-X/2</td>
<td>Provisional list of Documents (in this document)</td>
<td>Secretariat</td>
<td>All</td>
</tr>
<tr>
<td>I-GOOS-X/3</td>
<td>Provisional List of Participants (in this document)</td>
<td>Secretariat</td>
<td>All</td>
</tr>
<tr>
<td>I-GOOS-X/4</td>
<td>Report of I-GOOS Chairperson</td>
<td>Shao Hua Lin</td>
<td>3.1</td>
</tr>
<tr>
<td>I-GOOS-X/5</td>
<td>Draft Resolution: Program of Action for GOOS 2012-2013 (Draft)</td>
<td>I-GOOS Board</td>
<td>4.1</td>
</tr>
<tr>
<td>I-GOOS-X/6</td>
<td>Draft Resolution: Strengthening and Streamlining GOOS (Draft)</td>
<td>I-GOOS Board</td>
<td>4.2</td>
</tr>
<tr>
<td>I-GOOS-X/7</td>
<td>I-GOOS X Report (this document)</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-GOOS-X/xx</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Document Code</th>
<th>Background Documents</th>
<th>Responsible</th>
<th>Agenda item</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL-2367</td>
<td>Circular Letter Invitation: <em>Tenth Session of the IOC-WMO-UNEP Intergovernmental Committee for the Global Ocean Observing System (I-GOOS-X), June 2011, Paris, France</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOS-176</td>
<td><em>Ninth session of the Intergovernmental Committee for the Global Ocean Observing System (I-GOOS), Paris, France, 10-12 June 2009: executive summary report</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOS-128</td>
<td><em>A Review of the Structure GOOS</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOOS-187</td>
<td><em>I-GOOS Board VI Report</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOC/INF-1273</td>
<td>Planning and Implementation for GOOS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*This list is for reference only. No stocks of these documents are maintained.*