



Intergovernmental Oceanographic Commission
Reports of Meetings of Experts and Equivalent Bodies

**Executive Board
of the IOC-WMO-UNEP
Intergovernmental Committee
for the Global Ocean Observing System
(I-GOOS Board-V)**

**Fifth Session
9 and 13 June 2009
Paris, France**

Intergovernmental Oceanographic Commission
Reports of Meetings of Experts and Equivalent Bodies

**Executive Board
of the IOC-WMO-UNEP
Intergovernmental Committee
for the Global Ocean Observing System
(I-GOOS Board-V)**

**Fifth Session
9 and 13 June 2009
Paris, France**

IOC-WMO-UNEP-ICSU/I-GOOS Board-V

Paris, June 2009

English only

ABSTRACT

The 5th session of the Executive Board of the IOC-WMO-UNEP Intergovernmental Committee for the Global Ocean Observing System (I-GOOS Board) was held in Paris, France, on 9 and 13 June 2009. On the first day the Board prepared for I-GOOS IX, held immediately following. On the second day, the Board assessed the decisions and outcomes that had arisen from the I-GOOS-IX meeting and decided on a specific set of actions to follow up on during the intersessional period.

TABLE OF CONTENTS

SUMMARY		Page
1	OPENING AND WELCOME	1
2	REVIEW OF I-GOOS BOARD-IV ACTIONS	1
3	PREPARATIONS FOR I-GOOS-IX	2
4	FOLLOW-UP TO I-GOOS-IX	3
	4.1 <i>FUTURE OF I-GOOS</i>	3
	4.2 <i>SUSTAINABILITY OF I-GOOS</i>	7
5	ANY OTHER BUSINESS	8
	5.1 <i>DATE AND PLACE OF NEXT SESSION</i>	8
6	CLOSURE OF THE SESSION	8
7	LIST OF ACTIONS	8

ANNEXES

- I. AGENDA
- II. LIST OF PARTICIPANTS
- III. LIST OF ACRONYMS

1 OPENING AND WELCOME

The Chair, François Gérard (France), opened the meeting at 13h00 on 9 June 2009 and welcomed the participants. Participants included the elected and ex-officio members of the Board, guests of the Chair, including the newly elected co-chair of the regional council, and Secretariat staff. The Vice Chair from Peru, Hector Soldi, was unable to attend. The Chair thanked the members for attending and the Secretariat for the generous arrangements. The Chair then asked for any comments on the agenda, which was adopted.

The GOOS Project Office Director introduced the meeting documents. By agreement, not all of these had been made publicly available on the meeting website, though all had been emailed to all participants in advance of the meeting. They included the draft summary for policy makers, as well as some initial feedback from the UK IOC delegation on it, a Secretariat produced strategy paper entitled 'the future of I-GOOS' and the results of a recent consultancy by Jim Baker to look at the interactions between IOC and WMO.

2 REVIEW OF I-GOOS BOARD-IV ACTIONS

The Chair went through the actions of the 4th Board meeting in order. The agreed status of these actions is listed in the table below.

Board-IV-1	Detlef Stammer to provide a translated version of his report [<i>on European practices regarding standard underway measurements from Research Vessels</i>] in English, French and Spanish if available.	Translated versions were not made available. Not achieved. Closed.
Board-IV-2	GRA's to report how they deal with this issue [<i>standard underway measurements from Research Vessels</i>] in their region at the 4 th Forum.	Results from the Forum published as GOOS report 174, although this particular issue was not addressed. Closed.
Board-IV-3	OOPC to produce the GOOS benchmark report concentrating only on the global/climate module. Coastal climate input would come only from GLOSS. Report to synthesize content of the 18 national reports to I-GOOS-VIII and be published no later than 3 months prior to I-GOOS-IX.	Published as GOOS report 173. Reported to UNFCCC SBSTA in 2009. Done.
Board-IV-4	GRA's to report on regional monitoring efforts for a set of core coastal variables from the COOP Implementation Strategy.	Published as GOOS report 174. Partially achieved. Done.
Board-IV-5	GOSIC to attend 4 th GRA Forum and be asked to assist GRA's in showcasing their activities, information and observational data on the GOSIC website.	Done.
Board-IV-6	OOPC to produce a shorter, more focused, template to be prepared for I-GOOS-IX reporting based only on open ocean benchmarks. GPO to send this new template to GOOS and IOC national focal points well in advance of 2009 I-GOOS meeting.	OOPC elected to employ UNFCCC reporting template, with optional supplementary reporting for I-GOOS. Done.
Board-IV-7	Ralph Rayner to investigate using the GEO mechanism to raise funds for the GOOS	Contained in GSSC report. Actions will be delivered to I-GOOS. Done.
Board-IV-8	GPO to prepare a first draft [<i>of the GOOS summary for Policy Makers</i>] and circulate to the Board for comment.	Delayed several months. Done.

Board-IV-9	Chair to prepare a powerpoint presentation describing the summary for policy makers, even if still in draft form, to show to the Forum.	Not possible as draft was not ready. Closed.
Board-IV-10	Mary Altalo to prepare a distribution list of policy makers who will receive the document. All members are asked to assist by sending her relevant policy maker names/addresses for their regions.	Not possible as draft was not ready. It was agreed a strategy is required. Closed.
Board-IV-11	Invite West Australia GOOS ArcticROOS, Canada and SOOS to the 4 th GRA Forum	Done.
Board-IV-12	Ralph Rayner to submit a task in each GEO societal benefit area referencing the GOOS implementation plans (both climate and coastal) and listing I-GOOS Chair, François Gérard, as the point of contact.	Done.
Board-IV-13	Jay Pearlman to bring the IOC data policy ... to GEO at the next meeting of its Architecture and Data Committee and seek to harmonize these policies.	Closed.
Board-IV-14	Ed Harrison (OOPC Chair) and Candyce Clark (JCOMMobs Chair) to route this POGO request [<i>for coast estimates of GOOS components</i>] to individuals in charge of the various components of the open ocean module of GOOS.	Done.
Board-IV-15	GPO to contact POGO Secretariat informing them of action 14, reminding them of the importance of including remote sensing in their efforts and suggesting CEOS as an appropriate body to contact in that regard.	Done.
Board-IV-16	GPO to add this topic [<i>highlighting national regulatory or statutory ocean information requirements as a mechanism to enhance national contributions to GOOS</i>] to the letter being sent to the GRA Forum Organizers.	Legal, operational, and other types of requirements. These do exist at the national level. Ongoing.
Board-IV-17	GPO to send a letter as described [<i>on planning the 4th GRA forum</i>] to GRASP.	Done.
Board-IV-18	Tom Gross and Simonetta Haond to work 70% on GOOS instead of 30%.	Done.

3 PREPARATIONS FOR I-GOOS-IX

The Chairman suggested that he would try to complete I-GOOS-IX by lunchtime on Friday allowing the Board to meet again on Friday afternoon instead of Saturday morning.

The Board then went through the Agenda of the I-GOOS-IX meeting in detail.

The Chair asked who might be asked to serve as a rapporteur. The GPO Director suggested Jean Folack (Cameroon) would be appropriate and perhaps amendable to taking on the task. The Chair suggested Trevor Guymer (UK) would be a good choice to Chair the nomination committee. The Chair suggested Hector Soldi (Peru) would be a good choice to chair the resolutions committee.

Discussion arose on how to deal with the 'Baker Report' on modalities of IOC WMO interaction. It was decided the Chair would point out the existence of this document to I-GOOS at its meeting but that it would not be made available to I-GOOS members. It was decided that the appropriate audience for this report were member states of IOC, not I-GOOS.

Action 1. Chair (François Gérard) to inform I-GOOS members of the existence Baker Report [**Done 10/6/09**].

Action 2. *GPO Director to ask the IOC Executive Secretary to mention J. Baker's Report in his speech to Member States, inform them that it can be provided to any of them on request, and ask for their comments on it to be sent to Keith Alverson at IOC and Geoff Love at WMO by September 1. The Executive Secretary should emphasize in presenting this plan to IOC Member States that this is an informal process and that it is parallel to the process being carried out at WMO. [Done 9/6/09]*

Kouadio Affian inquired regarding the ability of individual Member States to report on their national programs. The GPO Director pointed out that he had received several such requests and had always replied that the agenda had been decided by the Board specifically excluding such an item, but that Member States were welcome to intervene in discussion on agenda items 4.2, National Contributions to GOOS, and 4.3, Establishment of GOOS national committees. The Chair decided Albert Fischer would provide the overview of Member State contributions, and the Chair would decide, based on the degree of demand for individual national statements, whether a separate, after-hours, session of I-GOOS would be called to allow more detailed national reporting to the meeting.

Action 3. *Chair to inform I-GOOS members that their 'national reports' should come in discussion after presentation of agenda items 4.2 and 4.3. If there are numerous reports requested, a separate session after the hours of the regular meeting can be added. In any case these national reports should be limited to no more than 3 minutes each. [Done 10.6.09]*

The Chair suggested that the reports on agenda item 4 should be given one after the other with no intervening discussion by member states. These presentations should be at most 20 minutes long. They will be followed by a general discussion on all the sub-items within section 4 by the Member States. The same was decided for agenda topic 5.

The GPO Director noted that agenda item 6.2 (GCOS) would be presented by Carolin Richter, the recently appointed Director of the GCOS Secretariat, in lieu of John Zillman who has a conflicting engagement to give a presentation to the WMO executive council in Geneva on the same day.

The Chair requested that IODE and ABELOS be reinstated in the agenda. The Secretariat pointed out the Chairs and Secretariat contacts of ABELOS had IODE had not accepted the invitation to attend, which is why the items had been removed.

Action 4. *The Chair to reinstate ABELOS and IODE on the agenda as items 6.3 and 6.4 before Member States are asked to approve the agenda. [Done 10/6/09]*

Action 5. *The GPO Director to inform Peter Pissierssens that he is strongly requested by the I-GOOS Board to present the IODE agenda item [Done 9/6/09]*

Jack Dunnigan suggested that the decision on leadership nominations at the national level was linked to the outcome of discussions related to the Secretariat paper on the future of GOOS and the Baker report.

4 FOLLOW-UP TO I-GOOS-IX

4.1 FUTURE OF I-GOOS

The Secretariat Director introduced two documents related to these discussions: 'The future of I-GOOS' and the 'Baker Review'. The Secretariat suggested, in light of the apparent lack of demonstrable results from past and present I-GOOS meetings, a possible model for increasing the efficacy of intergovernmental oversight and governance over GOOS. Future intergovernmental oversight and governance might be carried out directly by the IOC Assembly, during a dedicated half day, rather than

holding I-GOOS meetings independently or alongside the Assembly. Separate I-GOOS meetings might be called on an as needed basis at the specific request of the IOC Assembly, with a clearly articulated intended result, rather than on a statutory schedule. Enacting this, or any other, plan for changing the modus operandi of I-GOOS could be achieved by submitting a draft resolution modifying the terms of reference for I-GOOS for consideration and decision by the IOC Assembly or Executive Council.

Jack Dunnigan suggested that the Board's strategy discussions should focus on how to make the Global Ocean Observing System work, not the future of I-GOOS. Some countries are in position to make major investments to the system, but they are not the only owners. A multilateral governance mechanism allows a broader set of countries to assert ownership over the system. The real strategic problems we face are sustaining the existing observing system elements.

The Chair provided his views on the future strategic considerations. He noted that IOC suffers, as compared for example with WMO, from a relative dearth of statutory and regulatory requirements for observations, through international conventions or rules that might ensure the sustainability of GOOS. He noted that there has been difficulty transitioning GOOS from its scientific roots, overseen by the GSSC, to an operational global system overseen by intergovernmental cooperation through I-GOOS. He asserted that there had been difficulty implementing the coastal component of GOOS despite the development of regional alliances and the regional council. He suggested that GOOS was lacking an external "user pull" to make I-GOOS a success.

Ralph Rayner suggested that the "user pull" is certainly there, it has just not been recognized by IOC or I-GOOS. He suggested that the position oceanography is in today is not fundamentally different from the position Meteorology was in several decades ago. We need to transition from a patchwork of research efforts to a coherent observing system to address a wide range of operational and societal needs, thereby ensuring long term sustainability.

The Chair noted that I-GOOS is not seen by member states as a body that oversees and monitors the development or implementation of the global ocean observing system. The Chair suggested that a full day of GOOS dedicated discussion at the IOC assembly would be an improvement over the three day meeting just prior to the meeting.

Kouadio Affian stressed the need to build concrete programs. He gave as an example GOOS Africa. If we want to be able to provide 'deliverables' we need to ensure we have strong programs to deliver them.

Shaohua Lin pointed out that GOOS is often seen as simply a climate program, but the truth today is that there is a very wide range of purposes for GOOS beyond climate. Some countries may consider that climate observations and operational observations are in the WMO mandate. GOOS should more clearly serve general ocean science observational needs. She worried that much of IOC's mandate in ocean observations is being transferred to WMO. She saw a trend to IOC being more interested in ocean science, but asked where is this ocean science? She suggested IOC was not changing with the exterior world. Ocean science already has moved into an operational mode, so IOC should be engaged in operational science, rather than just letting WMO take it all over.

Thorkild Aarup agreed that it was vital to develop operational oceanographic institutions, products and services within IOC rather than turn them over to WMO.

Hans Dahlin agreed with the assessment in the Baker Report of the problems to face, though he felt the solutions suggested needed to be discussed. He pointed out that we lack certain things that WMO has in order to develop operational systems. One is a lack of a clear single institution responsible for ocean affairs at the national level in most countries. He stated that the climate module of GOOS has been successful because they have a reasonable plan. Coastal GOOS has been hampered by being dominated by pilot projects of interest primarily to academics rather than a solid, stepwise, achievable plan for coastal observations underlying key social benefits and thus attractive for governments to finance. He stated that the IOC needs much better representation at the national level.

Justin Ahanhanzo asked if the Board thought I-GOOS was any less efficient than the IOC Assembly itself. After nobody present was willing to suggest that this was the case, he continued by pointing out that GOOS is just one program among others at IOC. He suggested all IOC activities, be they science, tsunami or capacity building, should be targeted to supporting the development of the ocean observing system. The mandate of the IOC should change to give more resources and support to GOOS. Why, for example, did the IOC member states set up new tsunami warning system governance structures rather than simply accommodate tsunami, and all other coastal inundation hazard related observational needs, within the data stream delivered by GOOS? He noted that African nations are not putting substantial resources into satellite observations or Argo floats, but they have recognized the importance of operational observing systems for societal benefits in the coastal zone, and are developing them locally.

Ralph Rayner asserted that IOC plays no role in operational oceanography since it is not an operational agency. IOC plays a role in developing plans. He accepted that JCOMM can be an effective mechanism for delivering the operational aspects if properly resourced. Meanwhile, IOC can play a role in developing, for example, the clear stepwise, doable plans for coastal observations. Once developed IOC would either have to develop an operational capacity or find a home for maintaining this system. He clarified that WMO would certainly not be the home for such a coastal system.

Thorkild Aarup pointed out that EuroGOOS is focusing on a few small tractable elements in the coastal zone while the US is moving forward on much broader all inclusive fronts. He insisted that it is absolutely essential to develop some maps with some dots on them to tangibly demonstrate what coastal GOOS consists of. This would help to narrow down what we are selling and develop credibility.

Hans Dahlin pointed out that "GEOSS" is now the observational program of interest to ministers or European Commission Directors. He suggested that the advent of this new acronym has reduced the oceanographic community's ability to use "GOOS" as the flag to rally the interests of policy makers. Our 'banner' is not working any more.

Shaohua Lin pointed out that in China government agencies, both national and local, not private companies or other entities, supports coastal observations. This government support is increasingly sustainable and is thus vital for any Chinese inputs to global systems. She stated that interest in the oceans in the Chinese government has grown substantially in recent years and that IOC needs to better highlight member state cooperation. Member States need to see some real value delivered by I-GOOS, beyond just policy discussions.

Albert Fischer regretted several statements that appeared to suggest that IOC was giving away operational activities to WMO. He pointed out IOC co-owns JCOMM so when the global operational system is implemented through JCOMM it does not constitute 'giving' the system away to WMO. If it is perceived this way, it is because IOC is not supporting JCOMM well enough in order to assert its co-ownership. JCOMM is IOC's technical commission. He further pointed out that the success of the OOPC system lay in designing a system with a clear need for international cooperation, with tractable targets. In order to achieve similar success for coastal GOOS, we need to target it regionally, where clear needs for shared data exist. Additionally it must be based on regional needs, priorities and capacities.

Ralph Rayner agreed. Coastal GOOS requires a coherent set of objectives. This is what we are asking member states to endorse - rather than hanging everything that everyone wants onto the program. He further stated that GEO/GEOSS should take provide the high level advocacy for these plans. If GEO/GEOSS were indeed successful it would be no problem for GOOS to simply disappear, but we are far from such a scenario.

Shaohua Lin reiterated that IOC needs to support its observational programs more in order to compete with WMO and GEO. She further stated the importance of ensuring national representatives to GEO are aware of and briefed on ocean issues.

Hans Dahlin pointed out that Oceanic National Representatives to JCOMM need to be more united in purpose in attending JCOMM-III than they have in the past.

The Chair summarized discussions. IOC was established in UNESCO to promote the development of ocean sciences, not services. However IOC is moving towards sustaining operational systems. The tsunami warning systems are an example. Because the UNESCO and member state financial support to IOC is flat, in order to develop its new operational mandate IOC is constrained to work with partners, including WMO. The area of interest within oceanography is however much wider than physical, climate related topics of interest to WMO. Thus a much wider range of partners need to be engaged. In developing our observing system, to serve all these partners and needs, we need to ensure that clear requirements and a tractable strategy for implementation is in place. Further we need a body to monitor success in the coastal zone – analogous to the role of UNFCCC plays for the OOPC. The climate module of GOOS is now well served under JCOMM. The primary challenge now facing GOOS, and indeed IOC, is to develop its coastal network based on local and regional user requirements.

Thorkild Aarup pointed out that we have spoken a lot about the importance of GOOS Regional Alliances, but they have little funding. He challenged developed country members of I-GOOS to support regional alliances comprised primarily of developing countries.

-O-O-O-O-O-O-O-O-O-O-

The second day of the I-GOOS Board meeting commenced after the successful conclusion of I-GOOS-IX, on Friday afternoon 12th June, 2009. The newly elected Chair of I-GOOS, Shaohua Lin, opened this second half of the I-GOOS Board meeting at 14h30. She welcomed both the returning participants as well as the newly elected vice-chairs Dr. Margarita Conkright Gregg, (USA) and Dr. Alexander Postnov, (Russian Federation), who joined the meeting for this second day. It was agreed that the outgoing Chair, Francois Gérard, would present the I-GOOS-IX agenda item to the 25th Assembly next week.

The Secretariat Director informed the Board that the draft I-GOOS-IX report would be ready by the end of the day, that the Secretariat would email it to Board members for their comments, which would be due by close of business, Monday 15th June 2009. The draft report will then be made available to the Assembly before discussion of the GOOS agenda item. The Draft Assembly Resolution will be sent to Board for comment by Sunday pm. It will eventually be added to the I-GOOS-IX report as an annex.

The WMO Executive Council 4.2.51 text relating to the consultant's report on IOC-WMO interactions was read out and the Board strongly encouraged the IOC Executive Secretary to follow a similar procedure.

Action 6. *Secretariat to request the Executive Secretary's opening speech to the Assembly include the following text: " A study to examine the cooperation and interactions between UNESCO/IOC and WMO in the implementation of the Global Ocean Observing System (GOOS) was carried out by Dr James Baker. His report provides a number of recommendations some pertaining to JCOMM and its role in the implementation of GOOS. IOC will make this report available and ask member states to comment on it before 1 September 2009. WMO has similarly asked it member states to comment on the report. IOC and WMO will develop a joint overview of the responses as input for the JCOMM-3 meeting in November 2009." [Done 13.6.09]*

The newly elected USA Vice Chair, Margarita Conkright Gregg, agreed to take the lead in development of a strategy for the marketing of GOOS.

Action 7. *USA Vice Chair, Margarita Conkright Gregg, in collaboration with GSSC Chair, Ralph Rayner, and the GPO, to develop a strategy for the marketing of GOOS. The summary for policy makers document, and its distribution will be part of this larger strategy. Deadline: for presentation to the next meeting of the Board (March 2010).*

Other actions from the Board are:

Action 8. *GPO to send a circular letter to IOC member states containing the existing list of GOOS points of contact and/or lead agencies and requesting either confirmation of these national GOOS point of contact or new nominations. The letter should further make countries aware of the web based national database under development. Deadline: December 31, 2009.*

Action 9. *GRC Chair to inform GRAs of the existence of the circular letter (see previous action).*

Action 10. *GPO to email all GOOS focal points when I-GOOS-IX meeting report is published. The body of the email should highlight the actions expected of Member States contained in the report. Deadline 31 December, 2009.*

Action 11. *Board members to assess the Baker report text and to review WMO member and IOC member state comments in advance of the next Board meeting (March, 2010), and at the Board meeting to prepare a statement on the report to be presented by the Chair to the IOC Executive Council in June, 2010. In addition, Board members will review the comments received by IOC and WMO and prepare an initial draft response on behalf of the Board to the JCOMM meeting Nov 4-10, 2009.*

Action 12. *Board to send comments on the draft summary for policy makers to Thorkild Aarup. Deadline: June 30, 2009.*

Action 13. *GPO to account for comments of the Board and then arrange for translation of the summary for policy makers into several languages, printing, and distribution to IOC and GOOS points of contact. Deadline: Prior to next meeting of the Board (March, 2010).*

Action 14. *Board members to review the Summary for Policy Makers and provide minor revisions to the document. Due data: 30 June, 2009.*

The incoming Chair, Shaohua Lin, suggested that each Board member be assigned a thematic area of responsibility. It was agreed that Margarita Gregg would be responsible for development of a GOOS marketing strategy, Kouadio Affian for capacity development, Shaohua Lin for the review and response to the consultant report on IOC-WMO interactions, and Alexander Postnov for stepwise implementation of the coastal module. As Hector Soldi was not present at the meeting the Chair, Shaohua Lin, agreed to discuss with him at the next opportunity, probably the IOC Assembly next week, to decide a thematic area for which he would be willing to take the lead.

4.2 SUSTAINABILITY OF I-GOOS

This agenda item was not discussed.

5 OTHER BUSINESS

5.1 DATE AND PLACE OF NEXT SESSION

The Secretariat Director noted that funds for developing country participation in I-GOOS Board meetings that had been previously provided by the USA and France would be exhausted after this meeting. Unless these extrabudgetary funds are replenished, or the Assembly revises the GOOS budget such that the 'governance' line is increased, then all participation in board meetings in the coming biennium will have to be fully self-funding. It was noted by the Secretariat that the Board will need to consider the budget for I-GOOS and the balance between activities and I-GOOS Governance. Currently, much of the budget is for governance.

The Board agreed it would meet for its 6th session alongside the GSSC meeting at Oceanology International, which will be held in London, 9-11 March 2010.

6 CLOSURE OF THE SESSION

The incoming Chair, Shaohua Lin, thanked the Secretariat for the facilities and preparation of the documents. All present thanked the outgoing Chair, François Gérard, for his stewardship of I-GOOS over the past four years. The Chair adjourned the meeting at 17h30 on 12 June, 2009.

7 LIST OF ACTIONS

Action 1. Chair (François Gérard) to inform I-GOOS members of the existence of Baker Report [**Done 10/6/09**]..... 2

Action 2. GPO Director to ask the IOC Executive Secretary to mention Baker Report in his speech to Member States, inform them that it can be provided to any of them on request, and ask for their comments on it to be sent to Keith Alverson at IOC and Geoff Love at WMO by September 1. The Executive Secretary should emphasize in presenting this plan to IOC Member States that this is an informal process and that it is parallel to the process being carried out at WMO. [**Done 9/6/09**] 3

Action 3. Chair to inform I-GOOS members that their 'national reports' should come in discussion after presentation of agenda items 4.2 and 4.3. If there are numerous reports requested, a separate session after the hours of the regular meeting can be added. In any case these national reports should be limited to no more than 3 minutes each. [**Done 10.6.09**]..... 3

Action 4. The Chair to reinstate ABELOS and IODE on the agenda as items 6.3 and 6.4 before Member States are asked to approve the agenda. [**Done 10/6/09**]..... 3

Action 5. The GPO Director to inform Peter Pissierssens that he is strongly requested by the I-GOOS Board to present the IODE agenda item [**Done 9/6/09**]..... 3

Action 6. Secretariat to request the Executive Secretary's opening speech to the Assembly include the following text: " A study to examine the cooperation and interactions between UNESCO/IOC and WMO in the implementation of the Global Ocean Observing System (GOOS) was carried out by Dr James Baker. His report provides a number of recommendations some pertaining to JCOMM and its role in the implementation of GOOS. IOC will make this report available and ask member states to comment on it before 1 September 2009. WMO has similarly asked it member states to comment on the report. IOC and WMO will develop a joint overview of the responses as input for the JCOMM-3 meeting in November 2009." [**Done 13.6.09**]..... 6

Action 7. USA Vice Chair, Margarita Conkright Gregg, in collaboration with GSSC Chair, Ralph Rayner, and the GPO, to develop a strategy for the marketing of GOOS. The summary for policy makers document, and its distribution will be part of this larger strategy. Deadline: for presentation to the next meeting of the Board (**March 2010**). 6

- Action 8.** GPO to send a circular letter to IOC member states containing the existing list of GOOS points of contact and/or lead agencies and requesting either confirmation of these national GOOS point of contact or new nominations. The letter should further make countries aware of the web based national database under development. Deadline: December 31, 2009..... 7
- Action 9.** GRC Chair to inform GRAs of the existence of the circular letter (see previous action).
..... 7
- Action 10.** GPO to email all GOOS focal points when I-GOOS-IX meeting report is published. The body of the email should highlight the actions expected of Member States contained in the report. Deadline 31 December, 2009..... 7
- Action 11.** Board members to assess the Baker report text and to review WMO member and IOC member state comments in advance of the next Board meeting (March, 2010), and at the Board meeting to prepare a statement on the report to be presented by the Chair to the IOC Executive Council in June, 2010. In addition, Board members will review the comments received by IOC and WMO and prepare an initial draft response on behalf of the Board to the JCOMM meeting Nov 4-10, 2009..... 7
- Action 12.** Board to send comments on the draft summary for policy makers to Thorkild Aarup. Deadline: June 30, 2009..... 7
- Action 13.** GPO to account for comments of the Board and then arrange for translation of the summary for policy makers into several languages, printing, and distribution to IOC and GOOS points of contact. Deadline: Prior to next meeting of the Board (March, 2010)..... 7
- Action 14.** Board members to review the Summary for Policy Makers and provide minor revisions to the document. Due data: 30 June, 2009..... 7

ANNEX I

AGENDA

- 1 OPENING AND WELCOME**
- 2 REVIEW OF I-GOOS BOARD-IV ACTIONS**
- 3 PREPARATIONS FOR I-GOOS-IX**
- 4 FOLLOW-UP TO I-GOOS-IX**
 - 4.1 FUTURE OF I-GOOS*
 - 4.2 SUSTAINABILITY OF I-GOOS*
- 5 ANY OTHER BUSINESS**
 - 5.1 DATE AND PLACE OF NEXT SESSION*
- 6 CLOSURE OF THE SESSION**
- 7 LIST OF ACTIONS**

ANNEX II

LIST OF PARTICIPANTS

CHAIR

François GÉRARD
Président Comité National Français pour la COI
Météo France
1, Quai Branly
75340 Paris cedex 07,
France
Tel: 33 1 45 56 70 11/16
Fax: 33 1 45 56 70 05
Email: Francois.Gerard@developpement-durable.gouv.fr

Hans DAHLIN
Director, Swedish Meteorological & Hydrological
Institute (SMHI)
Director, European Global Ocean Observing
System (EuroGOOS)
SE-601 76 Norrköping
Tel: +46 11 495 83 05
Fax: +46 11 495 80 01
E-mail: hans.dahlin@smhi.se

MEMBERS AND GUESTS

Kouadio AFFIAN
Director of CURAT
22 BP 582 Abidjan 22,
Côte D'Ivoire
Tel: 225 22 44 52 70
Fax: 225 22 44 52 70
Email: k_affian@yahoo.fr

Heather ALLEN
International Affairs Specialist
NOAA/Office of International Affairs
U.S. Department of Commerce, Room 6228
14th Street & Constitution Avenue NW
Washington D.C. 20230
Tel: +202 482 6196
Fax: +202 482 4307
E-mail: heather.allen@noaa.gov

Margarita Conkright GREGG
Director
NOAA/National Oceanographic Data Center
SSMC3, 3rd Floor
1315 East-West Highway
Silver Spring, MD 20910-3282
Tel: +301 713 3270
Fax: +301 713 3300
E-mail: margarita.gregg@noaa.gov

John DUNNIGAN
Assistant Administrator
NOAA/National Ocean Service
SSMC 4 1305 East-West Highway
Silver Spring, MD 20910
Tel: +1 301 713 3074
Fax: +1 301 713 4269
Email: jack.dunnigan@noaa.gov

Shao Hua LIN
Director-General
National Marine Data and Information Service
93 Tianjing City Rd, Liu Wei Rd
P.O. Box 74
Hedong District
300171 Tianjin
China
Tel: 86 22 2401 0803
Fax: 86 10 2401 0926/86 22 2401 0820
Email: shlin@mail.nmdis.gov.cn

Alexander POSTNOV
Deputy Director
Federal Service for Hydrometeorology and
Environmental Monitoring of the Russian
Federation (ROSHYDROMET)
Tel: 8 499 246 01 67
Fax: 8 499 246 72 88

Ralph RAYNER
GSSC Chair, Incoming
IMAREST
80 Coleman Street
London EC2R 5 BJ
United Kingdom
Tel: 44 20 7382 2600
Fax: 44 20 7382 2670
Email: Ralph@ralphrayner.com

SECRETARIAT

Thorkild AARUP
Ocean Observation and Services
1 rue Miollis
75732 Paris France
Tel: 33 (0) 1 45 68 40 19
Fax: 33 (0) 1 45 68 58 13
Email: t.aarup@unesco.org

Justin AHANHANZO
Ocean Observation and Services
1 rue Miollis
75732 Paris France
Tel: 33 (0) 1 45 68 36 41
Fax: 33 (0) 1 45 68 58 13
Email: j.ahanhanzo@unesco.org

Keith ALVERSON
Head, Ocean Observations and Services
Intergovernmental Oceanographic Commission of
UNESCO
1 rue Miollis
75732 Paris Cedex 15,
France
Tel: 33 (0) 1 45 68 40 42
Fax: 33 (0) 1 45 68 58 13
Email: k.alverson@unesco.org

Albert FISCHER
Ocean Observation and Services
1 rue Miollis
75732 Paris France
Tel: 33 (0) 1 45 68 40 40
Fax: 33 (0) 1 45 68 58 13
Email: a.fischer@unesco.org

Thomas F. GROSS
Ocean Observation and Services
1 rue Miollis
75732 Paris France
Tel: 33 (0) 1 45 68 39 92
Fax: 33 (0) 1 45 68 58 13
Email: t.gross@unesco.org

David KWABI
Ocean Observation and Services
1 rue Miollis
75732 Paris France
Tel: 33 (0) 1 45 68 39 27
Fax: 33 (0) 1 45 68 58 13
Email: d.kwabi@unesco.org

...

ANNEX III

LIST OF ACRONYMS

ABELOS	Advisory Body of Experts on the Law of the Sea (IOC)
CEOS	Committee on Earth Observation Satellites
COOP	Coastal Ocean Observations Panel
EuroGOOS	European Programme for the Global Ocean Observing System (GOOS)
GCOS	Global Climate Observing System (WMO-ICSU-IOC-UNEP)
GEO	Global Earth Observation
GEOSS	Groupe on Earth Observation System of Systems (GEO)
GLOSS	Global Sea Level Observing System (IOC)
GOOS	Global Ocean Observing System (IOC-WMO)
GOSIC	Global Observing System Information Centre (IODE)
GPO	GOOS Project Office
GRA	GOOS Regional Alliances
GRASP	GOOS Regional Alliance for the Southeast Pacific
GRC	GOOS Regional Council
GSSC	GOOS Scientific Steering Committee
I-GOOS	Intergovernmental Committee for GOOS
IOC	Intergovernmental Oceanographic Commission
IODE	IOC Committee on International Oceanographic Data and Information Exchange
JCOMM	Joint Technical Commission for Oceanography and Marine Meteorology
JCOMMOPS	JCOMM Observing Platform Support
OOPC	Ocean Observations Panel for Climate
POGO	Partnership for Observation of the Global Oceans
SOOS	Southern Ocean Observing System
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
WMO	World Meteorological Organization (UN)