

ICES SGGOOS Report 2007

ICES Oceanography Committee

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Report of the ICES-IOC Steering Group on GOOS (SGGOOS)

23-24 April 2007

Gijón (Spain)



ICES

International Council for
the Exploration of the Sea

CIEM

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Executive summary

- Despite the growing difficulties of IOC in order to maintain sustained support to SGGOOS during the last year, SGGOOS will continue its activities according to the Action Plan revised in 2006. The group will ensure the representation of ICES into GOOS through North Atlantic GRAs. Several actions are proposed to facilitate the interaction with IOC in the near future.
- Operational activities among the ICES community are increasing. Significant advances during last year included the review of the NORSEPP program, in the North Sea, and the signature of the action plan and the Memorandum of Understanding of IBI-ROOS between the participating countries France, Spain, Portugal and Ireland, UK, for the Iberian Atlantic, Ireland and Bay of Biscay.
- The outcome of the joint session between SGGOOS and PGNSP members on the process of creation of a new ICES Working Group on Operational Products (WGOOP), as outlined in the document by the Planning Group PGOOP, is the recommendation of taking a preliminary step consisting in the organization of a demonstration workshop in 2008. Such a workshop is aimed to increase the collaboration between producers and users of operational products in the design of WGOOP. Suggestions of chairs, topics and objectives are provided in the reports of both groups.

1 Introduction

1.1 Opening of the meeting

The Director of the IEO Oceanographic Centre in Gijón (Luis Valdés) welcomes the participants in both SGGOOS and PGNP meetings and briefed on the local facilities. Meeting rooms with projection and internet access were available for each group. A complimentary dinner was also offered by IEO to all participants.

After the welcome address both groups agreed to meet separately for their own business during the morning of the first day and then meet together for common issues.

1.2 Membership and participation in SGGOOS

The New ICES Address Manager facility set up in 2007 (<http://address.ices.dk>) included 29 members for SGGOOS. The ICES Chair (A. Bode) sent a first message to all members listed for preparation of the meeting. Only one member (Erik Buch, DK) declined participation in the group. For this meeting we had the active participation of eight members, either attending to the meeting (four members, see Annex 1) or sending relevant information to the attendants (four members). In addition, the group benefited from the presence of one local expert invited by the chair (César González-Pola) and the Chair of the OCC (Luis Valdés).

The Chair mentioned the low level of present participation of IOC in the group. The old SGGOOS web page hosted by IOC was not available from the GOOS web site and only a mention to SGGOOS 2006 report was made in the news section. Unfortunately IOC was unable to support the travel of the IOC Co-Chair (David Mountain) to the meeting. For personal reason, the IOC Co-Chair will be submitting his resignation before the 2007 ASC. The ICES Co-Chair also noted that he will end his four-year term with SGGOOS in 2008.

Despite these constraints, and taking into account the supporting comments received by non attending members (including the Director of GOOS Project Office at IOC), the participants decided that SGGOOS should continue its activities according to the Action Plan revised in 2006. Therefore several actions were proposed to keep the group running for the forthcoming years.

- The participants list must be updated regularly, and the less active members will be contacted by the Chair to provide alternate substitutes.
- To facilitate IOC participation, the annual meeting of SGGOOS in 2008 is proposed to move to IOC Headquarters in Paris. The nomination of a new chair from IOC will also be requested.
- A new ICES Chair must be also nominated by September 2007, to ensure participation in the SGGOOS 2008 meeting along with the exiting chair.

1.3 Adoption of the agenda

After the introductory remarks and discussions on the future steps for SGGOOS, the agenda for this meeting (Annex 2) was approved and Julien Mader kindly accepted to act as the rapporteur.

2 Identify and steer the development of global and regional linkages between ICES and GOOS bodies (ToR a)

2.1 Review the outcome of the 3rd. Forum for GOOS Regional Alliances regarding the implications for ICES involvement in GOOS implementation

H. Dahlin (with contributions from A. Kellerman and A. Bode) informed on the 3rd GOOS Regional Forum (14–17 November 2006, Cape Town, South Africa). The Report on this meeting was available on the web (<http://unesdoc.unesco.org/ulis/>). ICES was actively involved with Adi Kellerman as observer. During the meeting, progress on the regional development of GOOS was reported through presentations from several GOOS Regional Alliances (GRAs). Four sessional working groups were established to discuss and make recommendations on potential mechanisms for a coordinated development of the Global Coastal Network of the Coastal Module of GOOS, GOOS Regional Alliance–Large Marine Ecosystem Partnerships, the role of GRAs in the implementation the GEO Coastal Zone Community of Practice, and in the development of Integrated Systems for Multi-hazard Disaster Warning Systems. In addition, progress since the Second Forum and on the GRAs' Strengths, Constraints, Challenges, Priorities, Potential Solutions and Best Practice was reviewed.

The main recommendation was the revised organisational structure related to GRAs as shown in Figure 2.2.1.

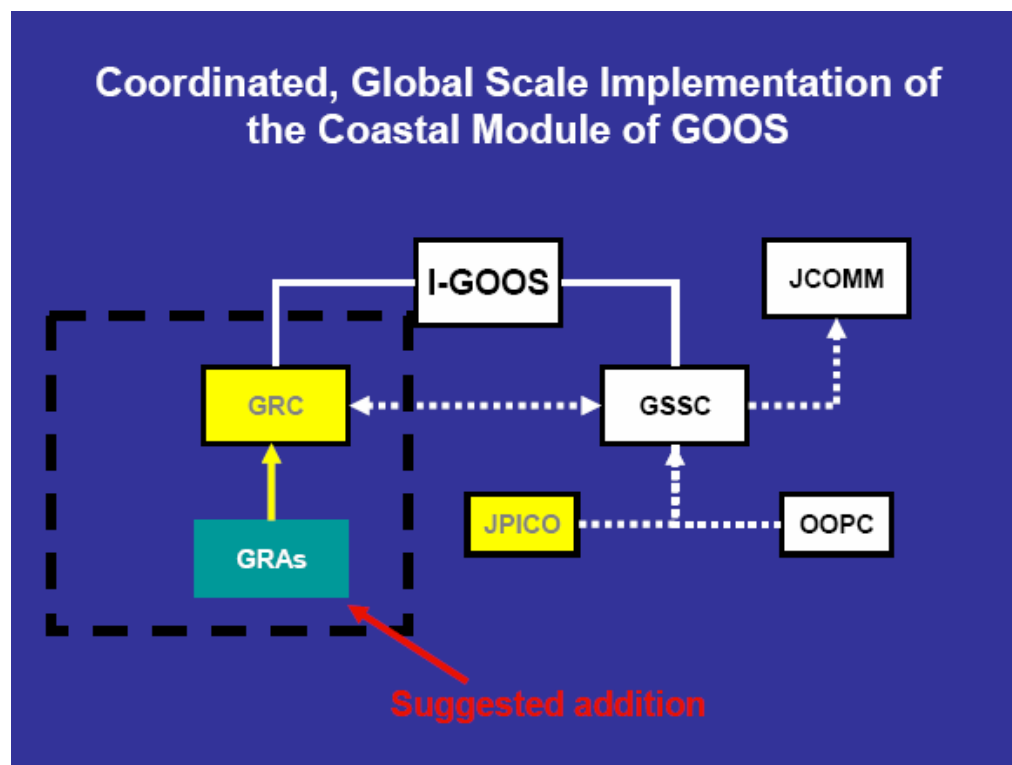


Figure 2.2.1. Proposed revised organisational structure of the governance of GOOS.

In such structure, the link between GRAs with the proposed GOOS Regional Council (GRC) is aimed to represent the interests of GRAs (which are non-governmental) to the Intergovernmental Committee for GOOS (I-GOOS), the GOOS Scientific Steering Committee (GSSC), and other global bodies, as appropriate and necessary, and to coordinate GRAs' contributions to the implementation of the Global Coastal Network (GCN) and the Global Module of GOOS. The new structure is also aimed to enable the implementation of the Global

Coastal Network. In this way, the proposed Joint Panel for Integrated Coastal Observations (J-PICO) would be an advisory body under GSSC for the purpose of coordinating the GOOS and Global Terrestrial Observing System (GTOS) efforts in coastal systems.

The Forum recommended that GSSC should work with the GRAs to establish criteria for recommending the non-physical variables that it would include in the JCOMM list of “pre-operational” assets. In that regard, GRAs should specify observational requirements in their respective regions and ensure that the methods and standards developed and maintained by JCOMM are used. In turn, JCOMM should ensure that the delivery of services and the implementation of operational elements would be coordinated through commitments from national representatives.

Regarding the GRAs’ organisational structure, the concept of Regional Ocean Observing Systems (ROOS) should be adopted, so as to convey the understanding that both the Coastal and the Global Modules of GOOS are being implemented in each region. The implementation for the Global Coastal Network (GCN) element of the coastal system should be coordinated with the global as well as the land-based systems. Also, one “end-to-end” demonstration/pilot project should be proposed per region, complying with GOOS principles.

The existing GRAs should be formally recognized by I-GOOS, in light of GOOS principles, and all GRAs should nominate a representative to serve on the GRC. The GRC elected Chairperson would have to serve as an ex-officio member of the I-GOOS Board. The GRAs should identify their priorities for ROOS implementation; the proposed GRC should then prepare the package of projects for presentation to the GSSC for endorsement. Finally, the Board should provide guidelines for the elaboration of GRA specific performance metrics to be jointly developed by the GRAs and the GSSC, so as to ascertain the capability of each GRA, guide the development of the ROOS towards maturity, and document progress in the achievement of regional goals.

2.2 Review the outcome of the GOOS/GSSC-POGO gap analysis for GEO Workplan regarding the implications for ICES involvement in GOOS implementation

The Partnership for Observation of the Global Oceans, POGO, is a forum created by directors and leaders of major oceanographic institutions around the world to promote global oceanography, particularly the implementation of an international and integrated global ocean observing system (<http://www.ocean-partners.org/>). A gap analysis in the POGO partnership was proposed at the Ninth Session of the Global Ocean Observing System Scientific Steering Committee (GSSC-IX) in Paris, France, 6–8 March 2006. No information could be obtained at the time of the SGGOOS meeting to be included in the discussions. Previous gaps identified by POGO were related to the lack of ocean observations in the Southern Hemisphere (POGO-2 meeting in 2000) and the gaps between Earth Observation research and operational needs (POGO-7 meeting in 2006). Information on this topic, if available, will be examined in the next SGGOOS meeting.

2.3 ICES activities in support of GOOS and operational services

The group acknowledged the Document submitted to GSSC-X/5.7.1 (13–16 March 2007, Seoul, Korea) by Adi Kellermann, summarizing the ICES activities in the field of physical and biological oceanography with a view to support developing operational capacities. The overall objective is to promote and further refine the science base for the ecosystem-based approach to management of human activities such as fisheries and other environment related pressures. Ongoing research in the ICES community has shown that changes in the environment are already visible and that there is evidence for an ecosystem response.

It is suggested that ICES, possibly in consultation with its Pacific Ocean mirror organization PICES, develops the science and technology bases necessary for operational service and products to observe the ecosystem features that can be recorded using biological oceanography parameters. This is to complete the existing operational, physical oceanographical systems with the necessary ecosystem elements, as it will be required for future quality status and trend assessments and advice.

2.4 Report on the Intergovernmental Panel on HAB:

The Eighth Session of the IOC Intergovernmental Panel on Harmful Algal Blooms (IPHAB) was held at UNESCO Headquarters, Paris, from 17 to 20 April 2007. The Panel acknowledged the continuation of projects and activities but stressed also that the IOC HAB Programme will only be able to develop and implement at the present rate in 2008-2009 if there is extra-budgetary financial support from Member States to fund programme staff and activities. The major achievements reported included the development of regional activities (ANCA, FANSA, HANA, WESTPAC/HAB), the developments within GEOHAB on HABs research in stratified systems but also in upwelling and eutrophic systems, the continued development of the IOC-ICES-PICES Harmful Algal Event Database, the implementation of training courses and training-through-research projects, and several key publications and international HAB conferences. The resolutions and recommendations concern strategies for assisting Member States in the mitigation of HAB events, biotoxin monitoring, management and regulations, strengthened regional HAB Programmes, and, particularly the implementation of HAB monitoring within GOOS. In this regard, IPHAB offers its collaboration to the GSSC to include monitoring and prediction of HABs in the operational programmes of GRAs. The Scientific Steering Committee of GEOHAB will collaborate with the GSSC in the development of joint GEOHAB-GOOS pilot projects with the goal of establishing operational HAB observing systems regionally (as a first step, this may be done under the umbrella of the GOOS chlorophyll pilot project, ChlorOGIN). In addition GEOHAB will establish an inventory at the GEOHAB web site of 'show cases' where integrated HAB observation systems are operational and linked to GRAs and Regional Operational Observing Systems (ROOS). More information on the HAB activities reviewed and Panel recommendations can be found at <http://ioc.unesco.org/hab/IPHABVIII.htm>

3 Identify and steer the development of components and activities of ICES contributing to the Global Ocean Observing System, as well as GOOS products relevant to ICES (ToR b)

3.1 Review (intersessional) ICES data centre user survey list of improved data products and identify those relevant to GOOS; identify and make recommendations on additional GOOS-relevant data products.

No information on this topic could be obtained in time for the SGGOOS meeting, as the head of ICES Data Centre recently resigned and no substitute was available. A request of information on the user survey will be made to ICES Data Centre in 2008.

3.2 Report on progress of ICES CTD/VOS system to provide real-time or near-real time delivery of environmental data from ICES coordinated research vessel surveys.

No information on this topic could be obtained in time for the SGGOOS meeting. The group acknowledged the sustained participation of some cruises and ships in the CTD/VOS system. For instance, the MERSEA project (coordinated by IFREMER until 2008) has been providing daily data (SST, surface salinity, fluorescence) to CORIOLIS. There are plans for extending MERSEA into the European Ocean Observing System (related to the European initiative

GMES) after 2008. Similarly, CTD data are sent to MERCATOR in near real-time (e.g. IEO physical oceanography cruises). ICES cruises are an important source of data for GOOS products. In order to increase the participation in the system, the group suggested that cruise and project leaders should be informed on the conditions of use of the data (e.g. real-time data sharing only for model validation) and the benefits received (e.g. data providers would have access to better forecasting products). In this way, national JCOMM representatives would be instrumental in the dissemination of the appropriate data policies and technical procedures. Also, GRAs (e.g. IBIROOS) are envisaged as the key instrument to improve the collaboration between data producers, modellers and users.

4 Identify and steer the development of regional ICES, PICES and GOOS pilot projects to demonstrate the benefits of taking a GOOS approach in the ICES context (ToR c)

4.1 Review, through presentations, highlight best practices and make recommendations to further develop and implement regional pilot projects

4.1.1 Report on PICES-MONITOR recommendations

The group was informed on the report sent by Adi Kellermann on the 2006 Annual Meeting of PICES in Yokohama (Japan), where he was as the ICES representative. PICES has an SGGOOS similar to the one at ICES. That group had been given the task to evaluate the situation of GOOS implementation in the North Pacific and the role PICES could play there. It was recommended that PICES does not take steps to initiate a North Pacific pilot GOOS. Instead, it was recommended that PICES establish a permanent working group to serve as coordinating body for North Pacific observing systems (NPOS) to provide a forum for representatives of the existing North Pacific observing systems to be developed cross-GRA (international) observing projects.

The following steps will be taken:

- Send a PICES representative to the 3rd Forum of Regional Alliances of GOOS to be held in Cape Town, South Africa, from 14–17 November;
- Contact the GOOS Scientific Steering Committee (GSSC; chaired by John Field) to explore possible PICES roles in the context of the broad objectives recommended above;
- Request PICES coordination role be placed on the agenda of the next GSSC meeting, 13–17 March 2007;
- Establish contacts with the leadership of the relevant GRAs to explore ways in which PICES can enable their development and coordination with other North Pacific GRAs.

4.1.2 Report on the operational oceanography system in the Basque Country

Julien Mader reported on recent implementations of operational oceanography in the Basque Country (Spain). The oceano-meteorological instrumentation network in the region consists of:

- six coastal oceano-meteorological stations;
- two offshore buoys (Wavescan), moored at 550 m and 450 m water depth;
- drifting buoys (<http://www.azti.es>);
- coastal video monitoring systems in areas of high natural and anthropogenic impacts (<http://www.kostasystem.com>);
- satellite images;

- further mobile or fixed systems (current meters, acoustic doppler profilers, tide gauges, CTDs, XBTs, etc.) used for specific data acquisition.

The system will be implemented in brief with the acquisition of a high frequency radar system, which will provide information on waves and the currents with a resolution of 6 km. In addition, two hydrodynamic models (TRIMODENA and ROMS) are used. These models, fed by appropriate atmospheric forcing, provide daily forecasts of current, temperature and salinity fields (<http://www.azti.es> and <http://www.esceo.org/servicios/azti>). Recent applications were related to the characterization of pollutant trajectories at the sea surface or along the water column, and to the analysis of information of sea waves, coastline and bathymetric evolution, and human activities at selected locations.

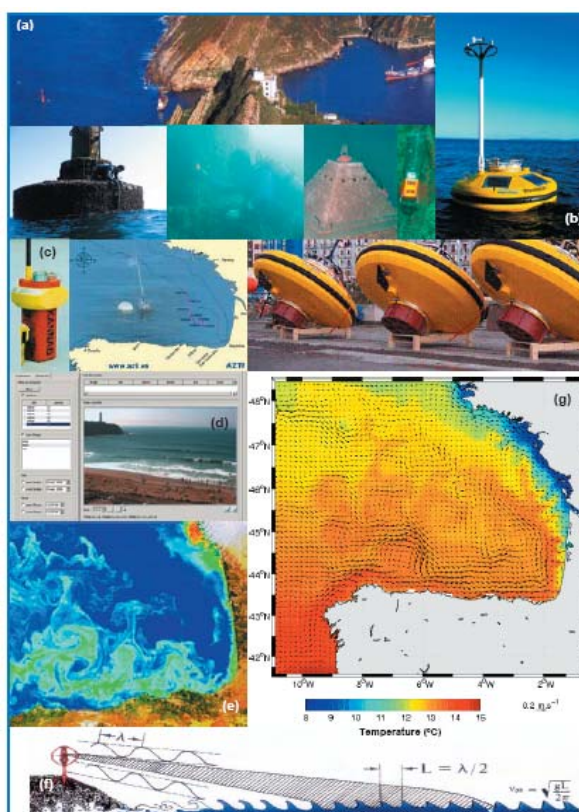


Figure 4.1.2.1. a) Oceanographic station; b) Wavescan offshore buoys; c) drifting buoy; d) video monitoring in the coastal area; e) satellite (SeaWiFS) image of the Bay of Biscay (chlorophyll a concentrations); f) high frequency radar to estimate current and wave fields; and g) numerical model output obtained with mean typical atmospheric forcing and climatology for January.

4.1.3 Report on IBI-ROOS

César González-Pola, on behalf of the chairs of the Iberian-Biscay-Irish Regional Operational Oceanographic System (IBI-ROOS), presented the Strategic Plan recently agreed for the period 2007-2010 (<http://www.ibi-roos.eu/>). IBI-ROOS creation initiated in a first meeting in February 2004 in Vigo (Spain) where participants from France and Spain reached an agreement on the necessity to build an European cooperation for operational oceanography needs in the Bay of Biscay area. The outline of the strategic plan was defined in this first meeting. During the second meeting in December 2004 in Brest (France) two chairs were nominated (S. Pouliquen from IFREMER, France and A. Lavin from IEO, Spain), and new participants from Portugal, UK and Ireland joined the group. The plan was revised to take into account the needs of the new countries and several working groups were created to draft the Strategic Plan. A third meeting in April 2005 concluded with the agreement on rationales, objectives and plans for the task team and aimed towards a strategic plan for the end 2006.

Finally, the fourth meeting in February 2007 in Madrid (Spain) concluded with the final agreement on IBI-ROOS Plan and signature of the Memorandum of Understanding. In addition, working groups for observation, data and applications were established.

Members of IBI-ROOS include both EUROGOOS members, as IFREMER and Metéo-France (France), IEO and Puertos del Estado (Spain) and IMR (Ireland), and partners outside EUROGOOS, as Mercator Océan and IRD (France), IST, Ipimar, Universidade de Lisboa and Instituto Hidrografico (Portugal), NOC (United Kingdom) and Meteo Galicia, INTECMAR and Fundacion AZTI (Spain).

The overall objective of the IBI Task Team in partnership with the international communities and agencies, is to develop and implement a sustainable system for optimal monitoring and forecasting in the Iberian -Biscay- Irish marine region using state-of the art remote-sensing, in-situ, numerical modelling, data assimilation and dissemination techniques. The strategic development will include:

- Organisation of the cooperation between the different partners;
- Improve data exchange at IBI-ROOS level;
- Define the IBI-ROOS basic monitoring network;
- Ease the development of a complete pre-operational system from regional to coastal and local scales through a downscaling strategy;
- Improve inputs to downstream services.

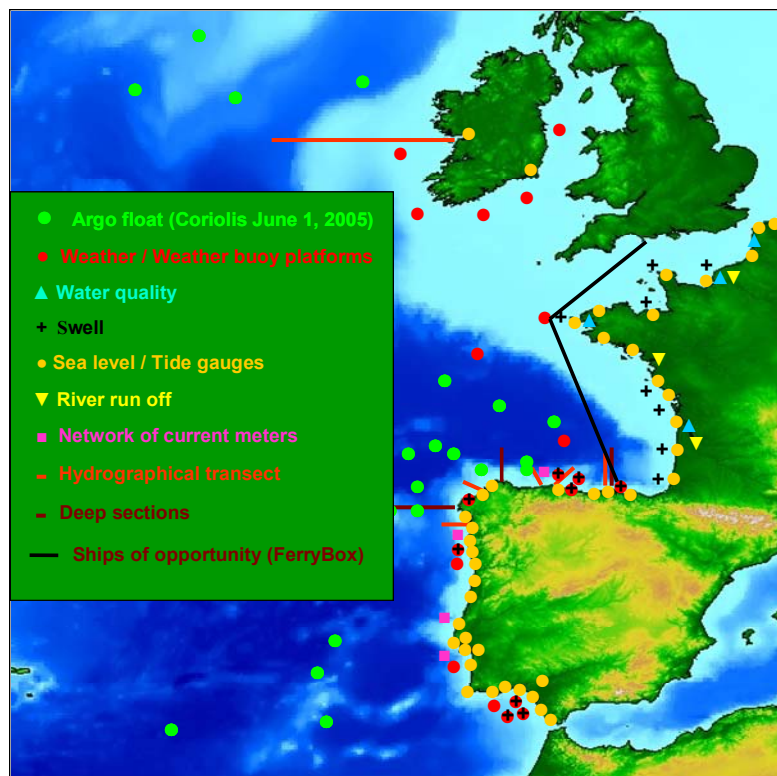


Figure 4.1.3.1. Existing Observing Systems in IBI-ROOS area.

4.1.4 Report on GODAE/IMBER contacts

The group acknowledged the contribution sent by P.Y. Le Traon on the interaction between Global Ocean Data Assimilation Experiment (GODAE) and the new IGBP-SCOR project Integrated Marine Biogeochemistry and Ecosystem Research (IMBER). Cooperation between GODAE and IMBER will benefit both projects and the wider scientific community by

facilitating dialogue between those developing new ecosystem models and the developers of the operational systems to promote mutual understanding of the requirements of the two communities. Communication between IMBER and GODAE started just over a year ago with Patrick Monfray acting as the IMBER representative. One part of the last GODAE symposium was dedicated to ecosystem modelling and essentially focussed on the current status of marine ecosystem modelling, data assimilation and observation systems.

Particular areas for GODAE and IMBER to address were identified as being:

- Ecosystem modelling & data assimilation;
- Physical data assimilators should bear in mind ecosystem model requirements;
- Schemes for assimilation of biogeochemical data are under development;
- Current assimilation schemes degrade the biogeochemistry;
- Overall high horizontal and vertical resolution models for the upper ocean are needed;
- Advanced schemes for a finer vertical structure are a key issue for nutrient transport;
- Interaction with coastal and shelf seas systems;
- Support for B-Argo (oxygen sensors are planned to be installed on Argo);
- Reanalysis.

To facilitate interaction with IMBER a GODAE-IMBER meeting has been organised for the 12–13 June at CNRS in Paris, France. The expected outcome is the establishment of a GODAE-IMBER Working Group to coordinate for both modelling and observations.

4.2 Review NORSEPP quarterly reports, evaluate the data products and propose strategies for the transition to the operational mode

NORSEPP reports are available through the ICES web. The reports are used by a number of ICES groups in the North Sea. The main gaps are still the need for rapid availability of hydrographic data from IBTS surveys and coastal inputs (contaminants, nutrients, ...) for modellers. PGNSP decided that NORSEPP actions in 2008 should be directed to ensure the transition to routine assessment and further develop in response to user requirements. Also, NORSEPP will contribute to broaden the experience to other regions. Suggestions on the strategies for transition were discussed during the joint session of SGGOOS and PGNSP and the conclusions are listed below.

4.3 Review Ferry Box reports, evaluate the data products and propose strategies for the transition to the operational mode

No updated report was received in time for the group meeting, although information on Ferry Box is available in the form of a EUROGOOS report. On several new lines instrumentation has been established, mainly in the North Sea. A new EU funded project will be submitted early 2008. Active search for funds to support some of the observational lines seem to be in progress. SGGOOS will request updated information on this program for 2008.

4.4 Review the outcome of discussions with WGPBI and PGNSP on the recommendation to form a working group on operational oceanography that would combine the roles of the groups.

The joint session between SGGOOS and PGNSP, after discussion of the report of the Planning Group on Operational Oceanographic Products (PGOOP) on the justification and plans to establish a new Working Group on Operational Oceanographic Products (WGOOP), concluded with the following recommendations:

- The establishment of a group promoting the collaboration between producers and users of oceanographic operational products and services is supported by both SGGOOS and PGNSP. The planning process should include development of a roadmap where the role of regional alliances and the products from existing groups are taken into account.
- A first step could be the organisation of a workshop aimed at the demonstration of working examples. The outcome of the workshop should include a roadmap and ToRs for the continuation of the collaboration between producers and users of oceanographic operational products and services. The workshop must be held before the first meeting of WGOOP.
- The ToRs proposed in the PGOOP report for the first meeting of WGOOP should be replaced by the planning of the demonstration workshop. Therefore all items suggested, although important for the group, should be postponed. The reason is to increase the participation of users in the process of creation of the new group.
- The composition of the new group should aim at a balanced participation of producers of operational products and users.
- Another outcome of the workshop would be the identification of the chairs of the new group.
- Examples of ToRs than can be proposed for the new group:
 - to develop and continue the dialog between producers of operational products and users;
 - to extend the use of operational products to regional scales, in connection with GOOS GRAs;
- NORSEPP activity in 2008 should plan for transition to routine assessment and further develop in response to user requirements. NORSEPP should prepare to broaden the experience to other regions through the process of developing the new group.
- The proposed conveners for the preliminary workshop of WGOOP are: Mark Dickey-Collas, (Wageningen IMARES, Netherlands), Martin Holt (NOOS), Hein Rune Skojdal (NORSEPP) and Einar Svendsen (PGOOP). SGGOOS will be able to comment on preliminary ToRs for the workshop proposed by the conveners.

5 Identify and steer the development of appropriate outreach activities to disseminate information about ICES and GOOS and to articulate the benefits of taking a GOOS approach in the ICES context (ToR d)

5.1 Make recommendations for GOOS plenary lecture and display for 2007 ICES ASC

This topic has been delayed from past two SGGOOS meetings. The recent changes in structure and strategy of both ICES and GOOS justified in part this delay. For the immediate future, however, it may be appropriate to request OCC to propose a Special Session for GOOS at the ICES ASC 2008.

5.2 Publicize ICES annual status reports (e.g. on climate and zooplankton) within the GOOS community

The group agreed that the SGGOOS flyer, designed, printed and distributed by ICES at the ASC 2006, is still valid for dissemination of its activities. Paper copies (and PDF file) are still available. Several IOC meetings were identified as targets for distribution, particularly the IGOOS-VIII meeting (50 potential attendants) and the General Assembly (>100 members).

5.3 Update (intersessional) and review SGGOOS website

SGGOOS information (members list, action plan, past reports) was removed from IOC GOOS website after May 2006. The site still informed of the availability of SGGOOS 2006 report (June 2006) in the news section with a link to the document. However, the outdated SGGOOS information at IOC server can still be found at the ICES website. The group decided that basic information on SGGOOS will remain at the ICES website (chair names and addresses, and reports).

5.4 Develop a contribution on GOOS activities in the ICES area for the ICES Newsletter in 2007

The group suggested that an appropriate contribution would be that of A. Kellermann's view of the role of ICES in GOOS, extracted from his contributions in the Observer Report on the 3rd GRAs Forum.

6 Next meeting of SGGOOS

The group decided that it would be appropriate that SGGOOS would meet at IOC Headquarters in Paris (France) from 21 to 22 February 2008.

7 Action points for SGGOOS members

- Appointment of new chairs (ICES, IOC, all members);
- Update of SGGOOS membership (A. Bode);
- Request ICES for more copies of SGGOOS flyer (50-300) for distribution at IOC (A. Bode);
- Report on IGOOS-VIII meeting in 2007 (H. Dahlin, G. Parrilla);
- Report on ICES Data Centre User survey (A. Kellerman, ICES Data Centre);
- Report on CTD/VOS system (S. Hughes);
- Report on Ferry-Box (F. Colijn);
- Report on the development of Ecosystem Status Reports in Canada (G. Harrison or substitute);
- Report on IBIROOS activities in 2007–2008 (J. Mader);
- Report on GODAE/IMBER Workshop in 2007 (P.Y. Le Traon);
- SGGOOS contribution to the ICES Newsletter (A. Kellerman's view of the role of ICES in GOOS from the Observer Report on the 3rd. GRAs Forum);
- Request OCC to propose a Special Session and plenary lecture for GOOS at the ICES ASC 2008 (all members).

Annex 1: List of participants in SGGOOS and PGNSP meetings

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Annex 2: SGGOOS Agenda

Monday 23/04/2007

- 09:00–09:30 Welcome. Introduction. Election of rapporteur. Adoption of agenda.
- 09:30–11:00 ToR (a) Review of GOOS news for 2006: Regional Alliances, GEO-POGO gap analysis
- 11:00–11:30 Coffee break
- 11:30–13:30 ToR (b) Review of ICES products: Data Centre results, CTD/VOS system, Status Reports
- 13:30–14:30 Lunch
- 14:30–16:30 ToR (c) Review of Pilot Projects: PICES-MONITOR, IBIROOS, NORSEPP, Ferry-Box
- 16:30–17:00 Coffee break
- 17:00–18:00 ToR (c) continuation
- 21:00 Complimentary dinner at Restaurante El Puerto offered by IEO to SGGOOS and PGNSP participants

Tuesday 24/04/2007

- 09:00–11:00 Joint session of the Planning Group for the North Sea Project (PGNSP) and SGGOOS. Discussion of plans and recommendations for the new Working Group on Operational Products and Services -WGOOP).
- 11:00–11:30 Coffee break
- 11:30–13:30 Continuation of joint session with NORSEPP
- 13:30–14:30 Lunch
- 14:30–16:30 ToR (d) Outreach activities. Conference for ASC 2007. Web page.
- 16:30–17:00 Coffee break
- 17:00–18:00 Plans for 2007–2008. Any other business. Closure of the meeting.

Annex 3: SGGOOS Terms of Reference 2007

The ICES-IOC Steering Group on GOOS [SGGOOS] (ICES-Chair: A. Bode, Spain) will meet at IOC Headquarters in Paris, France from 6–7 March 2008 to:

- a) Identify and steer the development of global and regional linkages between ICES and GOOS bodies:
 - i) Review the outcome of the IGOOS-VIII meeting.
- b) Identify and steer the development of components and activities of ICES contributing to the Global Ocean Observing System, as well as GOOS products relevant to ICES:
 - i) Review ICES Data Centre user survey list of improved data products and identify those relevant to GOOS
 - ii) Report on progress of ICES CTD/VOS system to provide real-time or near-real time delivery of environmental data from ICES coordinated research vessel surveys.
- c) Identify and steer the development of regional ICES, PICES and GOOS pilot projects to demonstrate the benefits of taking a GOOS approach in the ICES context:
 - i) Review, through presentations, highlight best practices and make recommendations to further develop and implement regional pilot projects.
 - ii) Review the plans for a demonstration workshop on operational oceanographic products.
- d) Identify and steer the development of appropriate outreach activities to disseminate information about ICES and GOOS and to articulate the benefits of taking a GOOS approach in the ICES context:
 - i) Make recommendations for a Special Session and Plenary Lecture on GOOS for ICES ASC.

SGGOOS will report by 1 April 2008 for to the attention of the Oceanography Committee.

Supporting information

PRIORITY:	The activities of this joint ICES-IOC Steering Group must be considered essential for the participation of ICES as an active regional partner in GOOS.
SCIENTIFIC JUSTIFICATION AND RELATION TO ACTION PLAN:	<p>Term of Reference a) Action Plan 1.7, 5.13, 5.13.1 (i) To provide annual summaries of GOOS activities to inform both the ICES and IOC communities and to recognize potential areas for collaboration.</p> <p>Term of Reference b) Action Plan 1.7, 5.13, 5.13.1 (i) To foster collaboration on data exchange and use within ICES and to raise awareness on data products needed for GOOS-related work. (ii) To promote the use of real-time data.</p> <p>Term of Reference c) Action Plan 1.7, 5.13, 5.13.1 (i) To promote and extend the development of GOOS regional projects in the ICES area. (ii) The demonstration workshop was recommended by SGGOOS and PGNSP as a first step in the process of initiation of a new working group on operational oceanographic products.</p> <p>Term of Reference d) Action Plan 5.10 (i) A Special Session and Plenary Lecture on GOOS was driven by the action points and recommendations since 2004. The review of the SGGOOS Action Plan in 2006 and recent changes at both ICES and GOOS structure and plans justifies this action.</p>
RESOURCE REQUIREMENTS:	N/A.
PARTICIPANTS:	GOOS, EuroGOOS, and other relevant GOOS bodies are free to contribute to the Group. Delegates are asked to ensure good representation of all ICES disciplines in this Group. Ideal participants are those already connected with

	GOOS activities in member countries.
SECRETARIAT FACILITIES:	None.
FINANCIAL:	No financial implications.
LINKAGES TO ADVISORY COMMITTEES:	Marine monitoring activities are closely relevant to the interests of all ICES Advisory Committees.
LINKAGES TO OTHER COMMITTEES OR GROUPS:	All ICES Science Committees have an active interest in this Group. Amongst the closely aligned Working Groups are many of the Oceanography Committee's Groups and IBTSWG under LRC.
LINKAGES TO OTHER ORGANIZATIONS:	IOC, EUROGOOS, PICES.

Annex 4: Recommendations

RECOMMENDATION	ACTION
1. request for nomination of a new ICES Co-Chair	OCC
2. request for nomination of a new IOC Co-Chair	IOC (GOOS)
3. propose a Special Session and plenary lecture for GOOS at the ICES ASC 2008	OCC
4. request copies (at least 250) of SGGOOS flyer for distribution at IOC and GOOS meetings	ICES
5. organize of a workshop aimed at the demonstration of working examples of operational oceanographic products.	OCC (PGNSP, PGOOP, NORSEPP, WGBPI) and LRC (SGRECVAP)