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RELATIONSHIP WITH OTHER PROGRAMMES AND BODIES

ORGANIZATIONS AND BODIES

BACKGROUND MATERIAL

SUMMARY

Reference: JCOMM-III/Doc. 13.2

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- Background material

BACKGROUND MATERIAL

UN system agencies

1. In 1999, the General Assembly decided to establish the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (the Consultative Process) in order to facilitate the annual review by the General Assembly, in an effective and constructive manner, of developments in ocean affairs and the law of the sea by considering the report of the UN Secretary-General on oceans and the law of the sea and by suggesting particular issues to be considered by it, with an emphasis on identifying areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced (resolution 54/33). The tenth meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS) was held at United Nations Headquarters in New York from 17 to 19 June 2009. In its deliberations on the report of the Secretary-General on oceans and the law of the sea, the Consultative Process at its tenth meeting focused its discussions on the *implementation of the outcomes of the Consultative Process, including a review of its achievements and shortcomings in its first nine meetings*. A full report of the meeting is available at: http://www.un.org/Depts/los/consultative_process/consultative_process.htm#2009.
2. UNESCO/IOC held a Technical Briefing on: "UNCLOS and the Outer Limits of the Continental Shelf" for providing awareness-raising for policy-makers and members of the Delegations of the Member States to UNESCO on 18 April 2008. UNESCO/IOC also has been providing advice on this issue to Delegations of UNESCO and IOC Member States that have requested it, in close cooperation with UNEP. Several African Member States have benefited from these activities.
3. The XLI UNESCO/IOC Executive Council adopted the *Guidelines for the Implementation of Resolution XX-6 of the UNESCO/IOC Assembly Regarding the Deployment of Profiling Floats in the High Seas within the Framework of the Argo Programme* through EC Resolution 4 (EC-XLI), as result of the discussions held at the VIII meeting of IOC/ABE-LOS.
4. UNESCO/IOC and WMO participate in UN-Oceans, a coordination mechanism for all agencies within the UN System active in marine and ocean affairs. The First Inter-Agency Meeting of UN-Oceans (Paris, January 2005) established the UN-Oceans Task-Force on marine biodiversity in areas beyond national jurisdiction for coordinating information input to the General Assembly, the Convention on Biological Diversity (CBD), and other international processes dealing with biodiversity in marine areas beyond national jurisdiction. A website was developed to address the issue of marine biodiversity beyond areas of national jurisdiction, as follows: http://www.un.org/Depts/los/biodiversityworkinggroup/marine_biodiversity.htm. The fifth meeting of UN-Oceans (Paris, May 2007) established the Task Force on Marine Protected Areas and Other Area-based Management Tools, on which UNESCO/IOC plays a leading role. The main purpose of the Task Force was to strengthen collaboration and coordination among UN organizations dealing with marine protected areas, especially to promote the accomplishment of the targets set by the World Summit on Sustainable Development (WSSD). As a contribution to the achievement of the goals of the Convention on Biological Diversity (CBD), the UNESCO/IOC has recently published the report *Global Open Oceans and Deep Seabed (GGODS) – Biogeographic Classification* (IOC/2009/TS/84), produced with the collaboration of Australia, Canada, Germany, Mexico and IUCN. This publication is available on the Website and can be downloaded from <http://unesdoc.unesco.org/ulis/>.
5. Given the alarming signals of degradation in the world's oceans at the World Summit on Sustainable Development (WSSD), the international community decided to maintain the Oceans under permanent review by "establishing by 2004 a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessments" (JPOI,

paragraph 36.b.). The UN General Assembly through Resolution 60/30, requested in 2005 UNESCO/IOC and UNEP to lead the start-up phase of the *Regular Process* by conducting an Assessment of Assessments (AoA), to be completed within two years. A Group of Experts has been working since March 2007 on the AoA report, which provides a framework and options for a Regular Process as they relate to three aspects: the assessment products that can be delivered during the first four years; the institutional arrangements for a Regular Process as well as the means for financing it. The AoA report is available on the Website and can be downloaded from <http://www.unga-regular-process.org/>. The AoA report has been finalized and was submitted to the Secretary-General of the UN for consideration by the *ad hoc* Working Group of the Whole, established by the UN General Assembly in November 2008 through UNGA Resolution 63/111. Additionally, an interactive on-line database on assessments and activities on the marine environment has been developed (www.unep-wcmc.org/GRAMED).

6. In keeping with GESAMP's mission "to provide authoritative, independent, interdisciplinary scientific advice to organizations and Governments to support the protection and sustainable use of the marine environment", five GESAMP Working Groups are currently active, as follows:

- (a) WG 1 (Evaluation of the hazards of harmful substances carried by ships) with IMO as the lead agency;
- (b) WG 34 (Review of proposals for approval of ballast water management systems that make use of 'active substances') with IMO as the lead agency;
- (c) WG 37 (Expanded scientific review of mercury and its compounds and threats to the marine environment) with UNIDO as the lead agency;
- (d) WG 38 (Atmospheric input of chemicals to the ocean) with WMO as the lead agency; and
- (e) WG 39 (Global trends in pollution of coastal ecosystems: retrospective ecosystem assessment) with IAEA-MEL as the lead agency.

Detailed information is available at <http://s244621454.onlinehome.fr/>. GESAMP is also actively contributing to the start-up phase of the UN Regular Process (AoA). The GESAMP Working Group on Atmospheric Input of Chemicals to the Ocean was established to enhance interaction of the marine community with atmospheric programmes in order to assess needs for the development of new model and measurement products for improving our understanding of the impacts of the atmospheric deposition of nitrogen, phosphorus and dust (iron) to the ocean. WMO leads this group assessment and established a Trust Fund for financial contributions of GESAMP partners to support this assessment.

7. Both the UNESCO/IOC and the WMO have contributed to the development of the UN Atlas of the Oceans (www.oceansatlas.org), an Internet portal providing information relevant to the sustainable development of the oceans. This portal is designed for policy-makers who need to become familiar with ocean issues and for scientists, students and resource managers who need access to databases and approaches to sustainability. The Atlas was developed 10 years ago and was launched online in June 2002. The website contains important and useful information such as maps, images and data. At the moment there are 10,000 registered members, a number that continues growing as well as the general use of the Atlas (on average the Atlas received ~100,000 monthly visits in 2008). Plans for the future include continuing developing and strengthening partnerships, obtaining a wider collaboration, adding new partners, updating content and functionality and ensuring equitable use. The seventh meeting of the UN-Oceans (Paris, April 2009) discussed how partners could best support continued growth and development of the UN Atlas – through regular content updating, a thorough review of the original topic tree and enlarged partnership. The meeting suggested that the Atlas could be used to as a key instrument

to promote UN-Oceans activities and communication messages (such as the upcoming and first celebration of UN World Oceans Day). Other suggestions include: (1) a calendar that could be created to publish UN-Oceans members' events/activities; and (2) a collaborative workspace that could be established to better coordinate the group's actions.

8. Ocean fertilization is an emerging issue that Parties to the London Convention and Protocol are addressing with the final objective to provide in 2009 a transparent and legal base for legitimate research activities and in which the Secretariats of the UNESCO/IOC and the Convention on Biological Diversity (CBD) are helping with scientific and technical assistance. A Technical Working Group was established by the London Convention/London Protocol (LC/LP) non-binding Resolution (LC-LP.1 (2008)) on the regulation of ocean fertilization, with the purpose of developing an assessment framework on ocean fertilization and a document summarizing the state of knowledge on ocean fertilization. The UNESCO/IOC has been contributing to these initiatives by revising the "UNESCO/IOC–SCOR Watching Brief on Ocean Fertilization" in order to provide a scientific summary for policy-makers on ocean fertilization, in collaboration with SOLAS, the global research programme Surface Ocean–Lower Atmosphere Study sponsored by IGBP, WCRP and SCOR. Additionally, the UNESCO/IOC, through the *UNESCO/IOC–SCOR International Ocean Carbon Coordination Project* (IOCCP), also cooperated with the Secretariat of the Convention on Biological Diversity (CBD) in compiling and synthesizing available scientific information on potential impacts of direct human-induced ocean fertilization on marine biodiversity, in collaboration with the UN Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC) and the IMO. The IOCCP has also assisted the CBD Secretariat in identifying scientists capable to critically peer-review the scientific synthesis of the impacts of fertilization experiments on marine biodiversity, before they are submitted to the forthcoming 14th meeting of the CBD Subsidiary Body on Scientific, Technical and Technological Advice, scheduled for May 2010. The full report is available at <http://www.cbd.int/marine/doc/scientific-synthesis-marine-peerreview-en.doc>.

9. WMO has been very active in implementing the International Convention for the Safety Of Life At Sea (SOLAS) in collaboration with the International Maritime Organization (IMO). In particular, a revised version of the MSC Circ. 1017 "Participation in the WMO Voluntary Observing Ships' (VOS) Scheme" (June 2001), was submitted to the Eighty-fifth Session of the IMO Maritime Safety Committee (MSC) (London, November-December 2008). The MSC revoked MSC/Circ. 1017 and issued MSC.1/Circ.1293 in December 2008, on which ship owners and masters concerns with regard to VOS data exchange were addressed. On this matter, the WMO Executive Council, at its fifty-ninth session (June 2007), adopted Resolution 27 (EC-LIX) – ship owners and masters' concerns with regard to VOS data exchange, which recommends continuing the trial masking schemes in successive years, unless decided otherwise by the WMO Executive Council, while pending the universal acceptance and implementation of a more suitable solution and the CBS migration to table driven codes. Full report of the WMO-IMO High-level Consultative meeting (Geneva, February 2007) is available at <ftp://ftp.wmo.int/Documents/PublicWeb/amp/mmop/documents/Publications-Other/WMO-IMO-Cons-Final-Report.pdf>.

Non-UN system organizations and programmes

10. In addition to the joint activities with other UN-System agencies, both WMO and UNESCO/IOC also collaborated extensively on marine issues with international organizations and programmes outside the system, both governmental and non-governmental, such as ICSU, IOI, IHO, ICES, PICES, POGO, EMSA, etc. Specific activities developed in collaboration with these organizations and programmes are addressed under the relevant agenda items.

Group of Earth Observations (GEO)

11. The Group of Earth Observations (GEO) was established by the first Earth Observation Summit (EOS I) in July 2003. A second EOS Summit was held in Japan in April 2004. The third

GEO Summit took place in Brussels in February 2005, where GEO was formally established and a ten-year GEO Implementation Plan adopted.

12. Since then, considerable progress has been made towards the development of a comprehensive, coordinated and sustained Global Earth Observation System of Systems (GEOSS), focused on nine beneficiary areas, responding to socio-economic needs (the so-called GEO Societal Benefit Areas or SBAs). Both the WMO and the UNESCO/IOC are directly involved in GEO and in the GEOSS process as Participating Organizations. The permanent GEO Secretariat is hosted by WMO in Geneva.

13. At its second session, the JCOMM agreed that the Commission should continue interacting with GEO in progressing the GEOSS Implementation Plan and its work plan. From the GEO Implementation Plan, which described a series of two-year, six-year and ten-year targets, successive GEO Work Plans dated 2005-2006 and 2007-2009 have been derived. An updated GEO Work Plan for 2009-2011 was released in January 2009 and is available on the GEO Website (www.earthobservations.org) under documents. The GEO Work Plans involved the WMO and the UNESCO/IOC, including JCOMM, in the implementation of several of the work packages dealing with ocean observation.

14. For example the GEO Implementation Plan lists the need to “support JCOMM to coordinate the implementation of and prepare regulatory and guidance information for an operational *in situ* ocean observing system” as a two-year target related to the Climate SBA. Related GEO Tasks included the CL-06-04 (GEOSS IPY Contribution), CL-06-06 (Global Ocean Observation System), US-06-02 (Pilot Communities of Practice), and CL-06-05 (GEOSS IPY Contribution).

15. The role of JCOMM and the importance of the ocean were highlighted in a series of high-level documents released in November 2007 on the occasion of the GEO-4 Plenary and the 4th GEO Ministerial Summit held in Cape Town, South Africa.

16. Among those documents, there was a book on “GEO Early Achievements”, which emphasised such specific elements of the ocean observing system as the ARGO network of profiling floats or the Global High Resolution Sea Surface Temperature (GHRSSST) Project. The book also described ocean-related aspects of interest to several SBAs, including Disasters (GEO Coastal Zone Community of Practice; the German-Indonesian Tsunami Early Warning System), Climate (EuroCryoClim; Improving projections of sea level rise and variability; Ocean Surface Topography Constellation; the Cryosphere Observing System – Legacy of the IPY), Ecosystems (Arctic Observing Network; Census of Marine Life; Continuous Plankton Recorder survey; European Marine Services MERSEA; Large-Marine Ecosystems Indicators of Climate Change; Indian National Centre for Ocean Information – INCOIS) and Agriculture (ChloroGIN – Building a Chlorophyll Ocean Global Integrated Network).

17. Another high-level document was a book entitled “The Full Picture”, with a preface by the President of South Africa, an introduction by Prof. José Achache, the GEO Secretariat Director, statements by the Minister of Science & Technology of South Africa, and the four GEO co-Chairs (Administrator of the China Meteorological Administration, European Commissioner for Science and Research, DG of Department of Science & Technology, South Africa, NOAA Administrator). The book content included national and regional reports, a detailed account of the GEOSS Components, including: ARGO; The blue Planet; Why the world needs a GOOS; New Marine Observations around Africa; European Marine Core Service, and descriptions of the expected Societal Benefit Areas of GEOSS, such as sea level rise and vulnerable coastal populations, applications of remote sensing in fisheries and aquaculture, satellite-based fishery service in India, and the green ocean – observations of marine biodiversity.

18. The advent of GEO has provided a number of benefits to the ocean observing community, through its high visibility, political awareness, enhanced coordination (e.g. with the

Committee on Earth Observation Satellites) and corresponding improved effectiveness and potential savings. GEO has also allowed new achievements (e.g. GEONETCast, Data Sharing Principles) of global significance. It has helped engage new players into observations and identify new opportunities.

19. The key issues facing GEO leading up to the next Ministerial Summit in 2010 are: data sharing principles; interoperability arrangements; and, governance and sustained financing as GEO transits from a developmental to operational phase for a System of Systems. The next Plenary will be held in Washington in November 2009. Further progress can be expected for the future, which will require the sustained contribution of WMO and UNESCO/IOC, including JCOMM and the ocean observation community in GEO.

CEOS

20. The Committee on Earth Observation Satellites was created in 1984. It comprises 25 members (space agencies operating EO satellites) and 20 Associates (including WMO and UNESCO/IOC) mostly representing user organizations. CEOS was instrumental in promoting the establishment in 1998 of the IGOS (Integrated Global Observing Strategy) Partnership and in proposing the "Theme" approach. The first Theme report published in 2001 was devoted to the Ocean. IGOS Themes were further transferred in 2008 into GEO (see above) when the IGOS Partnership was terminated.

21. In 2006, CEOS developed the concept of "Virtual Constellations", as a way to improve coordination among ongoing and future satellite missions in view of better fulfilling user requirements and needs. Four-prototype constellation projects were initiated, one of them being devoted to ocean surface topography. In 2008, CEOS accepted two additional constellation projects for further consideration, both of them being devoted to ocean surface variables, namely surface wind vectors and ocean colour.

22. In the fall of 2008, JCOMM, including the Expert Team on Operational Ocean Forecasting Systems (ET-OOFS), took part in the initiatives aimed at securing the continuity of satellite systems for ocean observation. Concern was expressed about decisions relative to Jason-3 as part of the high-altimetry satellite series initiated by the US-French Topex/Poseidon satellite mission launched in August 1992 and continued with the US-French Jason-1 satellite launched in December 2001 and the USA-Europe Jason-2/OSTM satellite launched in June 2008. Concern was also expressed about the inclusion in the second segment of the European Space Agency's Sentinel series of a second flight model, named Sentinel 3-B, of an ocean-dedicated satellite. Both systems are deemed essential to provide sustained and comprehensive observations of ocean surface temperature, winds, waves, topography and spectral reflectance of paramount importance for marine meteorology and ocean monitoring and forecasting.

23. Positive signs were received late in 2008, with the European decision of the second segment of the Sentinel programme including Sentinel 3-B, though with a delayed launch date, and early in 2009, with the inclusion of a Jason-3 budget request in the NOAA FY-2010 budget released by the President of the US for submission to the Congress, while the Jason-3 programme proposal is progressing in the European side.

24. The Surface Vector Wind Constellation Team has analysed the situation as regards the routine usage of satellite-derived surface vector wind (SVW) and significant wave height (SWH) products by those developing countries with responsibility for operational high-seas forecasts under the Global Maritime Distress and Safety System (GMDSS), with a view to broaden it. It appears that there is a low operational use of those parameters, which have been observed and distributed on the GTS for more than ten years. A detailed analysis of the reasons behind this situation and of the ways to overcome them has been performed by CEOS. Issues of data accessibility, training and capacity building, and data policy and timeliness are involved.

Industry and commerce

25. Both the WMO and the UNESCO/IOC have been working for many years with some organizations representing industrial and commercial marine-related activities and companies, including those involved with commercial shipping, the offshore oil and gas industry, equipment manufacturers and vendors, and providers of marine telecommunications systems (e.g. the International Chamber of Shipping (ICS), the International Association of Oil and Gas Producers (OGP) and CLS/Service Argos). These organizations often represent at the same time both major users of marine data and services, and potential sources of data and collaborators in marine monitoring and research.

26. JCOMM-II recommended the establishment of an *ad hoc* task team to enhance interactions with the private sector. The discussion during the session had focused on the importance both of being able to better understand the requirements of industry for met-ocean data and products, and also to engage industry more directly in the work of JCOMM and GOOS (Global Ocean Observing System). The *ad hoc* team, sponsored jointly by GOOS, met in March 2006 in Paris, France. It made a number of recommendations to enhance JCOMM/GOOS/Industry interactions. Subsequently, it was decided by the Management Committee that this task team should be merged with a parallel industry coordination mechanism established by the GOOS Scientific Steering Committee, which now includes experts representing JCOMM.

27. The WMO Executive Council, at its sixty-first session (EC-LXI, June 2009), addressed:

- (a) Options for WMO to stimulate establishment of global or regionalized international representation bodies of the private sector service providers to better facilitate coordination between that sector and WMO;
- (b) Approaches to address problematic issues connected with complementary and competitive cooperation between NMHSs and private sector service providers;
- (c) Policy and guidelines for an ethical framework for engagement with corporate sponsors and donors, taking into account pertinent recommendations of the WMO Audit Committee; and,
- (d) A mechanism involving the technical commissions concerned and the regional associations for developing guidelines for use by NMHSs on best practice models of partnership in furthering cooperation with the private sector, and in particular private sector service providers.

Detailed information is given in the *Abridged Final Report with Resolutions of the Sixty-first Session of the WMO Executive Council* (WMO-No. 1042), under the agenda item 4.2, available at http://www.wmo.int/pages/governance/ec/ec_docs_en.html.