



IOC/INF-1330  
Paris, 11 June 2015  
English only

**INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION**  
(of UNESCO)

**INFORMATION DOCUMENT**

**UN COORDINATION: A POTENTIAL ROLE FOR IOC UNDER A NEW UNCLOS  
IMPLEMENTING AGREEMENT ON BIODIVERSITY IN AREAS BEYOND NATIONAL  
JURISDICTION**

Summary. Member States have been discussing the issue of the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction (BBNJ) since 2006. In January 2015, the UN ad-hoc working group made a major step forward and reached consensus to develop a legally binding instrument/agreement under the UN Convention on the Law of the Sea (UNCLOS). Several activities under IOC could be recognized under a potential new agreement: (i) the Ocean Biogeographic Information System: a central data sharing and access point to millions of standardized, quality controlled marine species observations, connecting hundreds of marine biodiversity data holders. OBIS is recognized as the main global data repository by the marine scientific community; (ii) with regards to capacity building, the OceanTeacher Global Academy (OTGA) network of 10 Regional Training Centres, coordinated by IODE of IOC, can form a model for global training in marine biodiversity resource management; (iii) sustained ocean observations under the umbrella of GOOS; and (iv) guidance on marine spatial plans in ABNJ.



In 2012, Member States committed to address, on an urgent basis (*i.e.* before the end of the 69<sup>th</sup> session of the United Nations General Assembly (UNGA), Autumn 2015), the issue of the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction (BBNJ), by taking a decision on the development of an international instrument under the Convention on the Law of the Sea (UNCLOS). This would build on the work of the Ad Hoc Open-ended Informal Working Group on BBNJ, which had its first meeting in 2006. The working group was given a clear mandate and time frame (UNGA RES 68/70) to make recommendations to the 69<sup>th</sup> session of the UNGA on the elements (scope, parameters and feasibility) of a new instrument under UNCLOS. The January 2015 meeting, attended by around 200 participants, was the ninth and last meeting of the working group.

The working group concluded and agreed to develop a new legally binding instrument on BBNJ under UNCLOS. They also reached consensus on a negotiating process, by establishing a preparatory committee to make recommendations on the elements of a draft text of a legally binding instrument, based on the package agreed in 2011, by the end of 2017 and for the UNGA to decide at its 72<sup>nd</sup> session whether to convene an intergovernmental conference to elaborate the text of the agreement/instrument.

The 2011 package included: (i) marine genetic resources, including the question on the sharing of benefits, (ii) measures such as area-based management tools, including marine protected areas, environmental impact assessments and (iii) capacity building and the transfer of marine technology.

Currently the majority of Member States are in favour of a third agreement under UNCLOS and consider biodiversity as common heritage, for which the principles of equitable access and benefit sharing apply. However, some Member States argue that the lack of biodiversity conservation is not caused by a legal gap but by the lack of implementation of existing agreements and regimes. In addition, some believe that an international instrument based on soft law containing guidelines and best practices may gain broader universal participation and be more effective.

Although the working group had extensive discussions on the scope of new agreement, there is still no consensus on which human activities would be regulated under a new law, what exactly the goals and mechanisms would be, including how to organize access and benefit sharing, and which body or bodies would be in charge. This should become clearer once the preparatory committee starts its work. Of importance is that UNCLOS recognizes the role of IOC in Marine Scientific Research and Transfer of Marine Technology.

Below are four existing activities under IOC, which are of relevance to BBNJ.

### **A global biodiversity data-sharing platform: Ocean Biogeographic Information System**

The Ocean Biogeographic Information System (OBIS) currently holds 43 million marine species observations provided by a worldwide network of 500 institutions, and continues to grow as the worldwide resource that can provide a necessary baseline for global environmental and ecological impact studies and biodiversity monitoring in all areas of the ocean, from healthy pristine waters to heavily impacted and potentially high risk areas. OBIS is also unique because it holds data from all marine species including non-commercial and non-target fishing species, which allows a holistic (ecosystem) approach to measure impacts of activities in ABNJ.

OBIS is a key source of information for the identification of Ecologically or Biologically Significant Areas (EBSAs) within and beyond EEZs, a process led by the secretariat of the Convention on Biological Diversity (CBD). So far OBIS contributed to eight regional EBSA workshops (and OBIS is recognized for this role at CBD COP 10, COP 11 and again recently at COP12). OBIS also provides training in the context of the Sustainable Ocean Initiative (SOI) of the

CBD (OBIS representatives will attend 3 SOI Capacity Building workshops in Peru 2015, Korea 2015, Mexico, 2016).

In May 2013, technical experts at the UN Ad Hoc Open-ended Informal Working Group on BBNJ recognized OBIS as an appropriate mechanism for data and information sharing in areas beyond national jurisdiction, to support the selection of marine protected areas and environmental impact assessments and improve capacity building, benefit sharing and transfer of marine technology. In addition, the Deep Ocean Stewardship Initiative (DOSI) published a call in June 2014, signed by 85 deep-sea scientists and 14 international initiatives, to develop an international field program in Areas Beyond National Jurisdiction (ABNJ) and a coordinated data repository in conjunction with the International Seabed Authority and OBIS. Mengerink *et al.* (SCIENCE, 16 May 2014) called for a funding mechanism as part of a benefit-sharing regime in ABNJ to support scientific research and information generation including support for a global deep-ocean data repository, such as OBIS.

The 69<sup>th</sup> session of the UNGA (A/RES/69/245, December 2014) referred to OBIS under IOC as part of important contributions of Marine Science to the UNCLOS.

A new implementing agreement under UNCLOS would benefit from recognizing and giving a role for OBIS because it already provides a shared global marine biodiversity knowledge base for ocean governance, and one that (i) promotes international cooperation, (ii) provides equitable access to data and benefits globally, (iii) enhances scientific understanding and knowledge generation and (iv) provides important baselines for marine biodiversity monitoring and assessment in all areas of the world.

### **A global network of regional training centres: OceanTeacher Global Academy (OTGA)**

The IOC/IODE technical training programme called OceanTeacher is being significantly expanded and transformed into a so-called “Global Academy” (OTGA) that will also provide a global mechanism for the transfer of technology in relevant marine scientific research and taking into account the needs of developing States, including Small Island Developing States (SIDS). IOC/IODE is establishing a network of IODE/OTGA Regional Training Centres (RTCs) in Latin America, Africa, Indian Ocean and Western Pacific, all of which will be connected through the OceanTeacher Learning Management System and will use a multilingual approach to scientific and technical training.

Training courses will be able to cover all main IOC programmes including ocean observations, data and information management, building information products and services, early warning systems, mitigation of negative effects, and the application of area-based management tools. Currently 10 institutions in Belgium, China, Colombia, Kenya, India, Malaysia, Mozambique, Senegal, South Africa, and the USA are setting up OTGA regional training centres.

The IODE’s Ocean Teacher Global Academy is a direct response to the need expressed in the UNCLOS Article 276 with regard to the establishment of regional centres, in order to stimulate and advance the conduct of marine scientific research, particularly by developing States, and to foster the transfer of marine technology. This call was reiterated in the outcome document of the Third International Conference on Small Island Developing States (SIDS) held in Samoa last September (2014).

### **Global Ocean Observing System (GOOS)**

The Global Ocean Observing System (GOOS) aims at building an integrated framework for sustained ocean observing to support operational ocean services worldwide, including the provision of accurate descriptions of the present state of the ocean, including living resources;

continuous forecasts of the future conditions of the sea for as far ahead as possible, and to form the basis for forecasts of climate change.

GOOS, established in 1992, receives UN sponsorship (UNESCO/IOC, WMO, UNEP and ICSU) and is coordinated from the GOOS Project Office at IOC. In 2005, the 23<sup>rd</sup> Assembly of the IOC noted that with the advent of the proposed Global Earth Observing System of Systems (GEOSS), the GOOS should be considered as the marine component of the GEOSS.

The GOOS Expert Panels focus on setting requirements for ocean observations, defining Essential Ocean Variables based on scientific and societal needs, assessing the readiness of observing technologies and providing guidelines and common best practices of observing elements. While the first two Panels have focused on Physics/Climate and Coastal observations, GOOS has now set up a Panel for Biology/Ecosystems, recognizing the growing scientific and societal needs for sustained observations of ocean biological and ecosystem variables. A close link is built with the Biodiversity Observation Network of the Group of Earth Observation (GEO BON), which will define Essential Biodiversity Variables to support the assessment of the internationally agreed Aichi 2020 Biodiversity targets and will build indicators for assessments under the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES).

A new agreement under UNCLOS could recognize the role of GOOS in supporting and developing sustained ocean observations and marine research programmes to underpin decision-making.

In addition to a global ocean observation, data sharing and training platform, IOC can also contribute to marine spatial planning in ABNJ.

### **Marine Spatial Planning (MSP)**

As emphasized in the preamble to UNCLOS, "the problems of oceans space are closely interrelated and need to be considered as a whole". Marine spatial planning (MSP) is a tool that can enhance integrated, ecosystem-based and anticipatory approaches to the marine environment as called for in Chapter 17 of Agenda 21. As a place-based approach to coastal and ocean management, MSP is an important tool for balancing economic development with conservation and ecosystem-based management goals by, among other things, reducing conflicts among marine users. MSP may also be thought of as a "tool for improved decision-making with the objective to balance sectoral interests and achieve sustainable use of marine resources and provide stability and transparency."

According to the principles defined in the IOC Guide on Marine Spatial Planning (MSP Step by Step approach, *IOC/2009/MG/53*), MSP involves:

- an ecosystem-based, area-based, integrated, adaptive, strategic and participatory process that balances economic development with environmental conservation and
- utilizes spatial and non-spatial tools in order to achieve social and economic objectives.

It can incorporate and build on sectoral space-based management tools such as those described above, as well as Marine Protected Areas (MPAs) and other sources of information on the ecological, biological, scientific, cultural significance of an area.

In the context of ABNJ, the existing international framework for area-based management tools faces challenges at both global and regional levels. As regards the regional level, it is noted that (i) most existing tools are merely sectoral; (ii) ABNJ in certain regions do not have regional fisheries management organizations, arrangements or regional seas agreements, that could adopt such tools; (iii) the effectiveness of some regional tools may be compromised by insufficient universal support; and (iv) diverging levels of protection of ABNJ among regions has various consequences.

As regards the challenges at the global level, it is noted that regulatory bodies for some human activities are lacking as well as a comprehensive legally binding framework on area-based management tools in ABNJ, which could contain: (i) minimum requirements for global and regional instruments and bodies, and guidance on their respective roles; (ii) confirmation of the authority of relevant global and regional bodies to identify, designate and manage area-based management tools and an obligation for all states to respect these tools; and (iii) mechanisms to stimulate regional action or take action by default.

Despite the challenges, IOC as a leading UN body in the conceptual development of the MSP, is well placed to provide technical support to the ABNJ negotiation process and future agreement as it relates to area-based management tools. Having first defined the main principles of MSP in 2009, for the last 10 years, IOC has documented progress in implementation of MSP at regional and national level and identified best practices that could be applied in the ABNJ context. Through inter-agency mechanisms such as UN-Oceans, relevant agencies with a mandate for sectoral management in the ocean can also be mobilized to provide coordinated inputs on the development of area-based management tools. IOC maintains a large network of MSP practitioners that can be called upon to provide technical advice to the negotiation process. Finally, through its capacity development interventions, IOC is stepping up its efforts in training the next generation of MSP managers and experts. Specific consideration to ABNJ could be built into these training activities.

Links:

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- Ocean Biogeographic Information System: [www.iobis.org](http://www.iobis.org)
- OceanTeacher Global Academy: [www.oceanteacher.org](http://www.oceanteacher.org)
- Global Ocean Observing System: [www.ioc-goos.org](http://www.ioc-goos.org)
- Marine Spatial Planning Initiative: [www.unesco-ioc-marinesp.be](http://www.unesco-ioc-marinesp.be)

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