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INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
(of UNESCO)

INFORMATION DOCUMENT

PROGRESS AND STATUS
OF THE OCEAN BIOGEOGRAPHIC INFORMATION SYSTEM, 2013

Summary. This document provides background information on the Ocean Biogeographic Information System (OBIS). Since 2011, OBIS has moved from supporting a research project, the global Census of Marine Life, where it had dependable financial support and a clear focus, to support the broad mandates of the IOC and IODE. The OBIS data and expertise grants the IOC a world leading position in marine biodiversity, as is also recognized by the 193 Member States of the Convention on Biological Diversity. OBIS reaches out to a large scientific community and provides valuable tools and services to our Member States. OBIS fills a unique niche in IOC and has the potential to strengthen several IOC and UNESCO programmes. What is needed now are IOC Member States to follow through and address the pressing financial needs to continue the core programme of OBIS.

Between 2000 and 2010, the Ocean Biogeographic Information System (OBIS) was the data and information component of a US\$ 650 million, private-foundation led, global scientific project to undertake a Census of Marine Life. OBIS has been growing beyond the Census, connecting hundreds of data providers, and is now the world's largest online open-access database on the diversity, distribution and abundance of all marine life, from bacteria to whales. OBIS is used around the globe for planning ocean conservation policies, and identifying biodiversity hotspots and global trends in species distributions.

There is an increased need for more, and more accurate, time-series data on marine biodiversity to monitor the state of the marine environment and to better understand the ecosystem processes and potential impacts of climate change, in order to more effectively manage our marine living resources.

In addition, IOC Member States have repeatedly identified the need to acquire ocean biogeographic data for national ocean and coastal resource management, and have stated that knowledge of the ocean's biodiversity is of such importance to national and global environmental issues that governments should assume the responsibility for the continuing success of OBIS. OBIS provided the opportunity to adopt an existing global network for biogeographic data and to attract the associated research community that can and should be a continuous part of IOC's ocean mandate. As a consequence, in June 2009, the IOC Assembly adopted OBIS through resolution XXV-4 as a project of the International Oceanographic Data and Information Exchange (IODE) Programme.

The previous inter-sessional period (2011–2013) has been a transition phase for OBIS, in which IODE successfully facilitated the transfer of OBIS from being a private foundation-led activity under the Census of Marine Life, to become part of an intergovernmental organization, as a fully operational project under IODE. This information document reports on the status of the implementation of the actions under IOC Resolution XXV-4 (OBIS) and XXVI-10 (IODE/OBIS).

The IODE Group of Experts for OBIS (GE-OBIS) and the IODE Steering Group for OBIS (SG-OBIS) have been established. The SG-OBIS met twice in Ostend, Belgium (8–9 December 2011 and 19–21 November 2012); two co-chairs are elected and six informal task teams (technical, data, taxonomy, governance, outreach and training) are formed to further develop OBIS and support the execution of the Work Plan. The GE-OBIS has not met due lack of financial resources. The GE-OBIS has an advisory role on technical developments. The 3rd session of the SG-OBIS will take place in Ostend, Belgium in November 2013. No resources are currently available for a GE-OBIS meeting.

The IODE Committee at its 22nd session adopted the recommendation to establish a new IODE structural element, an "IODE Associate Data Unit (ADU)", to engage a wider community and complement the already existing National Oceanographic Data Centres (NODCs). The OBIS data nodes, who are responsible for the data collection and networking in their region or area of expertise, will become either NODCs or ADUs in IODE. The addition of ADUs in IODE opens the way to expanding the current network of OBIS nodes. The OBIS secretariat, with support from the OBIS task teams, is currently preparing an IOC Manual and Guides for OBIS nodes that will include the terms of reference of OBIS nodes, the procedure to establish OBIS nodes, standards and best practices (OBIS cookbook) and a section on quality assurance, criteria and evaluation of OBIS nodes.

Through OBIS, IODE was invited to participate in the iMarine EU FP7 project. iMarine started in November 2011 and will end in April 2014 (30 months). This income has enabled us to hire a P-3 coordinator for OBIS. Mr Ward Appeltans was recruited in May 2012. It should be noted that the IOC Assembly in June 2009 adopted OBIS within its IODE Programme (Resolution XXV-4), and with the intent to deliver a P-4/5 head of the OBIS project office, with the host institute providing a data manager and IT specialist. To this end, IOC established a multi-source account for the

support of OBIS, within the IOC Special Account. In 2010, contributions were kindly provided by Australia, Brazil and Canada. This budget enabled us to set up a contract with Edward Vanden Berghe through Rutgers University to ensure a continuation of the OBIS operations. Because Rutgers was financially not in a position to establish the IOC project office for OBIS, it was decided to move the management of OBIS to the IOC project office for IODE and to split the work into a P-3 OBIS project manager (Ward Appeltans) and to set up a contract with Rutgers to provide technical support to OBIS. However, due to the departure of Mr Vanden Berghe, Rutgers requested to terminate this contract by 31 August 2012. As both a coordinator and a data manager position are critical for the central OBIS secretariat, a P-1 data manager for OBIS, Mr Michael Flavell, was hired at the IOC Project Office for IODE in May 2013. Unfortunately, the current budget situation will not allow us to continue in this way beyond May 2014. On 21 May 2012, the Executive Secretary issued a [Circular Letter, 2441](#) requesting IOC Member States to contribute extra-budgetary funding for OBIS. This has not resulted in any contribution to OBIS. Through Resolution XXV-4/13.iv, Member States requested the preparation of documentation to the Director-General and the UNESCO Executive Board requesting a regular programme post for the OBIS Programme at the earliest opportunity. In view of the UNESCO financial situation this has not been possible.

OBIS does not operate in isolation, and continues to collaborate with external intergovernmental and international organizations dealing with global fisheries, environmental and biodiversity issues (e.g., the Biodiversity Observations Network of the Group on Earth Observations – GEO BON, the Global Biodiversity Information Facility - GBIF, the Food and Agricultural Organisation – FAO and the Convention on Biological Diversity – CBD), and it is expected that this role will be continued and expanded in the future, e.g., to support the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). A Memorandum of Cooperation with GBIF is in preparation, in which both organizations recognize each other as sister networks which share common goals in managing and sharing biodiversity data. OBIS is also requested to collaborate with Tara Oceans and the World Underwater Federation (CMAS).

During its 10th Conference, the 193 Parties to the CBD agreed to classify a diverse list of marine areas as ecologically or biologically significant. This work is part of the Strategic Plan for Biodiversity 2011–2020, and contributes in particular to Aichi Biodiversity Target 11 to conserve and sustainably manage at least 10 per cent of coastal and marine areas by 2020. Upon request by the CBD, OBIS is providing scientific and technical advice to define Ecologically or Biologically Significant marine Areas (EBSAs), through a series of regional workshops in 2011, 2012 and 2013. The UNESCO Emergency Fund provided US\$ 36,000 to OBIS for contributing to the identification of EBSAs in the North Pacific and West Africa region in 2013. In addition, the contribution of IOC/OBIS to the CBD will be presented in a peer-reviewed paper and at some strategic meetings.

Despite the fact that OBIS has been a success, continues to grow (in amount of data and number of data providers), is extensively used (on average 400 web visitors per day) and well cited in the scientific literature (Google Scholar reports about 7 papers per month that refer to OBIS), OBIS remains in a difficult financial situation. OBIS is at a cross-roads where it needs to design its future role and make strategic decisions to survive. A possible roadmap for OBIS is that it expands its activities from pure data integration and publication, to providing advanced services to science and policy (such as developing biodiversity indicator tools) and establishing a global platform to facilitate coordination of regional and national marine biodiversity observation systems. OBIS may need to deal with more data types beyond single species observations and further invest in improving data quality as well as continue to grow in terms of geographic, taxonomic and temporal data coverage.

OBIS has the potential to become an important, and unique, marine biodiversity programme within the UN system and can serve many IOC programmes, such as GOOS, IODE, HAB, Marine Spatial Planning, and also UNESCO projects, such as, Man and Biosphere, the marine World Heritage Programme, and the global Climate Change Initiative. It can also be part of UNESCO's contribution to the recently launched Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the UN World Ocean Assessment and the UN working group on biodiversity

beyond national jurisdiction. Achieving all these objectives requires resources. The chance that OBIS will receive (substantial) funding through UNESCO's Regular Programme remains low as long as the US continues to withhold funds. This means that OBIS will continue to rely almost entirely on extra-budgetary funding as well as in-kind contributions from institutions. In order to run the core programme of OBIS beyond May 2014, new resources are needed.

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