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(of UNESCO)

**Twenty-eighth Session of the IOC Committee on International Oceanographic Data and
Information Exchange (IODE-28)**

12-14 March 2025

**Performance Review of the IOC Project
Office for IODE 2024**

1. INTRODUCTION

Taco de Bruin (NIOZ, Netherlands) and Lesley Rickards (BODC, UK) were invited by the International Oceanographic Data and Information Exchange of UNESCO's Intergovernmental Oceanographic Commission (IOC-IODE) to review the Intergovernmental Oceanographic Commission of UNESCO's (UNESCO/IOC) Project Office for International Oceanographic Data and Information Exchange (IODE). The IOC Project Office for IODE is supported by a Memorandum of Understanding (MoU) between UNESCO/IOC and the Government of Flanders through the Flanders Marine Institute (VLIZ). This MoU was first established in 2005 and renewed in 2012, 2017 and 2022.

The main purpose of the UNESCO/IOC Project Office for IODE shall be:

- to establish a creative environment facilitating the further development and maintenance of IODE Projects, services and products with emphasis on improving the efficiency and effectiveness of the data and product/service stream between the stage of sampling and the user;
- to assist in strengthening the capacity of Member States to manage oceanographic data and information (by organising relevant training and the capacity building related activities and to provide ocean data and information products and services required by users;
- to liaise and maintain links with relevant UNESCO/IOC programmes and other projects as relevant to the projects implemented by the UNESCO/IOC Project Office for IODE;
- to establish and maintain links with other relevant organisations, institutions and programmes in order to promote cooperation with the UNESCO/IOC Project Office for IODE;
- organise and implement activities that contribute to the UN Decade of Ocean Science for Sustainable Development through decade actions submitted by IOC/IODE and/or IOC/CD.

The reviewers were free to make their own independent judgements in coming to the findings and recommendations presented here. One of the reviewers would like to express gratitude to his employer, the Royal Netherlands Institute for Sea Research (NIOZ), for allowing him to conduct this review.

2. CONTEXT

During the IODE Management Group meeting held in February 2024 it was decided to review the IODE Project Office activities. This review was requested by IOC/IODE, recalling that the MoU signed in 2022 between IOC and VLIZ is due to expire on 31 December 2026, and recalling that Article IV of that MoU states:

A review of the performance of the UNESCO/IOC Project Office for IODE shall be organised once, and prior to the expiry of this Memorandum of Understanding. The evaluation report shall be submitted for approval to the IODE Committee that oversees the Project Office activities. The IODE Committee may, as it deems necessary, recommend the renewal or extension of this agreement and will submit this Recommendation to the next available Session of the IOC Assembly or Executive Council.

However, because the only IODE Committee meeting between now and the expiration date will be in March 2025, it was decided to organize the Project Office review in 2024.

3. OBJECTIVES OF THE REVIEW

The objectives of the review are to evaluate the IODE Project Office activities and to propose or not the renewal of the current MoU between IOC and the Flanders Marine Institute (VLIZ). The current MoU will expire on 31 December 2026. It was required to evaluate the following areas:

- (i) Organisational performance
 - (a) How effective is the organisation in moving towards the fulfilment of its mission? (e.g. organisational performance (outputs and outcomes, major achievements, productivity, etc.), clients served, quality of services and products, performance of products and services)
 - (b) How efficient (e.g. costs versus services provided, staff turnover, outputs)
 - (c) If it has kept its relevance (e.g. adaptation of mission, meeting stakeholders' needs, adaptation to environment)
 - (d) Financial viability
- (ii) Enabling environment (e.g. policies, legislation, regulations, funding, allocation decisions, technological literacy, infrastructure and utilities, major stakeholders (clients, donors, beneficiaries, etc.))
- (iii) Organisational motivation
 - (a) History (e.g. establishment, major achievements, major struggles, changes in size, program, etc., major projects and funding)
 - (b) Mission (e.g. evolution of mission statement, organisational goals, role of mission in shaping the organisation, articulating research and research products)
- (iv) Organisational capacity: Strengths and weaknesses (e.g. leadership, strategic planning, business model, financial planning, governance, facilities and technology management, HR plans)

4. METHODOLOGY AND DOCUMENTS PROVIDED

4.1 METHODOLOGY

The review was performed by onsite and online interviews of Project Office staff, representatives of VLIZ, the Government of Flanders (Kingdom of Belgium), IODE, IOC, the Global Ocean Observing System (GOOS), and of the UN Ocean Decade Coordination Unit. A site visit took place between 16 – 18 October 2024. Online interviews were also held between 25 – 28 November 2024. In total, 20 interviews were conducted (see Annex 1 for a list of interviewees and their affiliations).

The following questions were asked to those persons interviewed (Interviews of Project Office staff considered a subset of these questions):

- How would you describe the relevance of the IODE Project Office in the current marine data landscape and for the future?
- What would you say are the strengths and weaknesses of the IODE Project Office?
- What do you consider as the major achievement of the IODE Project Office?
- We have been asked to review the performance of the IOC project office for IODE as part of the MoU with the Government of Flanders. Is there anything you think should be added to that MoU?

In addition, a survey of National Oceanographic Data Centres (NODCs), Associate Data Units (ADUs) and others was undertaken to enable a broader range of views to be included. Questions included strengths and weaknesses of the Project Office, major achievements and the importance of the Ocean Decade to IODE.

4.2 DOCUMENTS PROVIDED

- Documents of which the title starts with 785, 786, 787: these are the work plans and KPIs for IODE in the UNESCO regular programme (6 documents)
- Project Office contribution for the VLIZ yearbook 2024
- Description of tasks to be carried out by 3 seconded VLIZ staff at PO (2024-PO-Overview VLIZ staff-all staff.docx)
- PROPOSED MODALITIES FOR THE PERFORMANCE REVIEW OF THE IOC PROJECT OFFICE FOR IODE (prepared for IODE-26)
- PO work plan for 2021 (workplan IODE PO 2021-reviewMarch_afterpreplODE26-VF1.docx: this was the last such work plan submitted to VLIZ by the PO as Flanders stopped its direct financial support to the PO when the new agreement started)
- MoU 2012-2016
- MoU 2017-2021
- MoU 2022-2026
- IOC Project Office for IODE report on activities 2021 & provisional planning 2022
- Letter IOC IODE PO from Flanders - renewal of the MoU for the IOC IODE Project Office in Ostend
- EC43 document on the project office MOU « Renewal of the MOU between the Government of Flanders and IOC regarding the IOC Project Office for IODE, Oostende, Belgium (24 pages) 2010
- IOC Project Office for IODE: towards a new MoU. Version: 17 August 2016
- Renewal of the MOU between the Flanders Marine Institute (VLIZ) and IOC regarding the IOC Project Office for IODE, Oostende, Belgium (for IODE 21, 2011)
- Performance Review of the IOC Project Office for IODE 2020 (for IODE-26)

5. RESULTS AND ANALYSIS

IODE was established in 1961 and the Project Office in 2005; over this time the marine data landscape has evolved and will continue to do so in the future. IODE and the Project Office are well respected and trusted but have limited resources to respond to the community, thus hampering their ability to reach their full potential. The Project Office is in a unique position in the landscape; it is a highly relevant, respected, neutral place with connections around the globe. It has evolved over time and kept up with technological change. In readiness for the future, IODE has restructured its activities around three flagship Programme Components; the Ocean Biodiversity Information System (OBIS), the Ocean Teacher Global Academy (OTGA) and the Ocean Data and Information System (ODIS). These are all led by the Project Office and are UN Ocean Decade endorsed actions. Each of these components is fit for the future: for example, OBIS links to nodes for access to biodiversity data and has been involved with Environmental

DNA (eDNA), OTGA is ISO certified as a Learning Service Provider and has embraced e-learning and ODIS is an architecture that can be used widely (not just within the IODE context but also in other communities and even across disciplines) – the modern way of providing access to data.

The most obvious change since the beginning of the current MoU has been the advent of the UN Decade of Ocean Science for Sustainable Development (2021-2030). The Project Office hosts the Decade Coordination Office for Ocean Data Sharing (DCO-ODS), which has recently announced a new lead manager, scaling up its operations to support enhanced objectives. One of the key activities is to assist Decade actors with data and information challenges and opportunities and to contribute to the advancement of the development of the global digital ocean ecosystem (for which ODIS is a key architecture).

Interviewees and survey respondents were invited to comment on the strengths and weaknesses of the Project Office and to consider the major achievements of the Office. These are described below.

5.1 STRENGTHS

Global reach and equity

IODE and the Project Office has a long history and experience of working with Member States and, as a UN body, is authoritative and neutral bringing equity with little regional dominance. It is highly relevant to the marine data landscape as a respected neutral place and must stand strong. Over the years trust has been built up between the Project Office and the Member States. The Project Office brings everyone around the table – it has global reach and so, for example, includes Africa, Latin America and the Caribbean, bringing training to the ones that need it, not just to those located nearby. In addition, IOC has regional bodies; one of their roles is to partner with the Project Office.

The Project Office acts as a hub for connecting people, “a connector of dots” – the NODCs and ADUs, and Marine Information Managers. It is good at incorporating all, especially the Global South. The Project Office is also a hub for data and information management innovation with connection to a global network of centres and experts. A wealth of materials, for example Manuals and Guides, policies, and documents, are available to aid Member States.

The Project Office hosts a number of OTGA courses in-house. This means bringing participants from all over the world, for example from the Global South. Some, but not all, of the participants are funded by IODE. This is another occasion where the Flanders Government, through the MoU, contributes to capacity training in support of developing countries. By developing online e-learning modules for OTGA, the Project Office has further expanded its possibilities of those in need of (oceanographic data management) training around the globe. It was noticed that OTGA is also being used by other entities within IOC and by European (oceanographic data management) projects.

Staff

Both the interviewees and the survey contributors praise the Project Office staff, for example “*Dedicated Project Office team, with excellent leadership/drive from Head of the Project Office*”. Staff members are variously described as excellent, very knowledgeable, professional, competent, efficient, flexible, collaborative, helpful and positive. They are responsive to questions and requests for advice, listening to and supporting the needs of their community. They have strong organisational and communication skills, facilitating dynamic and regular communication among data management and marine information centres and structures. They are supportive of each other. Although Project Office staff are overstretched, there is still innovation and long-term planning for the future. One interviewee comment sums up the Project Office staff: “*Amazing work with limited time and limited resources*”.

The Project Office provides a very valuable focal point for international marine data management, especially for awareness, standards and quality. The Project Office is well connected to Member States and fosters collaboration through its international global network of NODCs and ADUs, built up and sustained for over many years. Support is provided to these data management centres and structures, helping them improve their practices. The provision of advanced tools and technologies promotes data sharing and improves global access to oceanographic data.

Key activities (Programme Components)

Since the previous Project Office review the Project Office has continued to grow and thrive. The wise move to restructure IODE activities around three Programme Components (each led by a member of the Project Office team), and Programme Activities provides increased focus to the breadth of activities and greater visibility to the key themes, that is OTGA, OBIS and ODIS.

The Project Office is a capacity development hub and there is positive engagement from stakeholders. It is efficient in running training programmes to enhance the capacity of member states through OTGA. It regularly organizes training and capacity-building workshops on key topics such as data management, interoperability, and ocean data visualization through OTGA, thus ensuring that developing countries can contribute to and benefit from the global ocean data infrastructure. The full range of topics available is vast and courses are delivered in a variety of ways: face-to-face, online and some are self-paced. The Project Office is always available to give support on training, resources and opportunities. In addition, the Project Office has good facilities for meetings/training courses.

OBIS is successful and continues to grow, building up incrementally and expanding into new areas, e.g. eDNA, collaborating with Biodiversity Beyond National Jurisdiction (BBNJ) and developing positive links with GOOS. Implementing has been very good and the operation is stable. The quality of work is of a high standard and the impact beneficial to all. The OBIS staff are excellent with good skill sets, connections and knowledge. OBIS has built up trust with the community.

ODIS is the open federated architecture which will form the basis for the digital ecosystem as foreseen for the UN Ocean Decade and beyond. ODIS can be used widely and promoted, for example, networking all major oceanographic data centres and linking with the WMO Information System (WIS 2.0). It allows for inter- and cross-disciplinary data and information search and exchange. Thus, IODE is playing a leading role in the future of oceanographic data management.

Importance of Flanders funding (and co-location with VLIZ)

Sustained regular funding over a long period from the Government of Flanders has been critical to the development of the Project Office. As noted elsewhere diversification of the funding stream is needed, but it is key that the Flanders funding continues.

Having the Project Office co-located with a marine research organisation is beneficial as this can encourage cooperation especially in areas of overlapping interest (e.g. biological/biodiversity work). There are further areas where cooperation can be advanced, for example, in a jointly run global specialised training centre for biology (OBIS, VLIZ, OTGA), more interaction between the VLIZ Data Centre, EurOBIS and OBIS, Ocean Decade actions, etc.

The presence of a UN Office in Ostend is also considered to be beneficial for the standing of Flanders and the Kingdom of Belgium internationally.

5.2 WEAKNESSES

The weaknesses identified by the interviewees and survey are interlinked. The most frequently cited weakness by both interviewees and survey respondents is (lack of) funding for the Project Office to operate smoothly and efficiently and to provide the necessary resources for the Office to make a step change in communication and raising its visibility, in particular beyond the IODE community.

Funding

There are several aspects to the funding issues.

- Firstly, it must be stressed that the Government of Flanders is to be greatly commended for its outstanding effort in providing funding the IODE Project Office for the last 20 years, during which time the Project Office has grown in responsibilities and activities.
- However, due to the success of the Project Office, there are no longer sufficient funds for the Office to work efficiently (i.e. more staff are needed to carry out the expected workload which is increasing).
- Therefore, the income stream needs to be increased; The Government of Flanders has made a *“heroic effort serving the world”* (actual quote from one of the interviewees) in its support for the Project Office over the last 20 years and shows the impact one country can have. This funding has been essential to the development of the Project Office and it is critical that it continues at the same level. This will then act as leverage encouraging others (e.g. IOC Member States, industry, philanthropic organisations) to step up and contribute the additional funds required to support the continued growth in activities.
- Current funding is such that consultants with short-term contracts are used rather than regular employees which is not sustainable in the long term.
- The Project Office has grown since its inception in 2005 and taken on new and extended roles – OBIS is an excellent example – but further funding is required to keep up with new responsibilities and to catch the items that are “falling through the net”.

Staffing and Resources

The PO staff team are excellent, as described in the ‘Strengths’ section, however in all areas they are overstretched. The team is too small for all the work to be done; there is a lack of permanent staff and a dependency on consultants leading to uncertainty and increased stress levels. One interviewee comment sums up the situation *“I think there’s a gap between the hamsters in the Project Office wheel trying to keep things going and the higher-level vision/strategic thinking.”*

There are several single points of dependency which creates issues if a staff member is absent for any period of time or when someone leaves. Normally another member of staff will step in, but this just moves the issue elsewhere and increases stress levels.

In addition, there are other perceived single dependencies - key members of Project Office are close to retirement and it is unclear if succession planning has taken place. The Head of the Project Office is due to retire by the end of May 2025 – a long gap before a successor is appointed is likely to be problematic.

This makes it difficult to take on new developments and to have the flexibility to meet new challenges. This is unsustainable in the medium to long term.

Visibility

Increased visibility is required for the Project Office and its Programme Components (OBIS, ODIS, OTGA); these are all led from Project Office, which means they should be able to be

promoted. It is no good having excellent products if they are not well known. Currently there is limited outreach and visibility to broader stakeholder communities both within and outside of IOC and IODE. The Project Office and IODE can learn from other organisations, for example VLIZ is very good at promoting and “selling” itself, with a dedicated international relations officer. To meet these needs of increased visibility a full-time communication and outreach member of staff is required. This person should develop a communication plan which could be used in a variety of situations including when funding is being requested from potential new stakeholders (e.g. philanthropic institutions).

An aspect of communication is the website; the new IODE website is a very welcome upgrade, but more IT and website support staff or budget would help the public face stay modern and relevant.

Additionally, as with any extensive network, it can be hard to explain everything that it does in a succinct way and communication with the Project Office may assume prior knowledge and terminology.

There is a view that there is not much interaction between IODE/Project Office and NODCs, probably due to a lack of staff resource. Although Circular Letters and generalised communication using mailing lists are used, different ways of communication may be needed in some cases to engage people. One NODC misses having regular information and/or newsletters on perspectives, activities and updates. Many of the communications with NODCs and ADUs are in English – perhaps consideration could be given to additionally using the other IOC languages. This can also be also true of meetings and training courses. An additional Community Manager could address the issues mentioned above and further strengthen the links between the Project Office and its IODE network.

The location of the Project Office in Ostend can mean that it is difficult to get to know those who work at IOC Headquarters in Paris; informal opportunities do not occur. The Project Office can be “forgotten” on occasion. Hopefully this is being addressed by engaging a staff member with IODE responsibilities in Paris. There are some communication issues with VLIZ due to the different administration systems in use.

5.3 ACHIEVEMENTS

A number of achievements were highlighted by both the interviewees and survey respondents; often these are closely related to the strengths. They are described below.

Programme components (OBIS, ODIS, OTGA)

Streamlining the work of IODE and the Project Office into Programme Components, Programme Activities and Projects has been a benefit and gives more focus and visibility to the important Programme Components of OBIS, ODIS and OTGA. Mention also should be made of the Ocean Best Practices System (OBPS) carried out in partnership with GOOS.

- The OBIS team within the Project Office has increased, with support from FUST and EU projects, which has enabled the continuous development of the OBIS platform. Discussions about collaboration with GOOS have been productive. In addition, OBIS has been closely involved in the BBNJ process and cooperation between them has been excellent. OBIS has been modernized to handle data from the successful eDNA citizen science project which showed a great species richness.
- OTGA has a long-standing commitment to capacity building, growing and adapting from how it was 20 years ago. It has excellent standing and ISO certification has improved its status. It is a global programme, running 50 well-developed courses/year with around a thousand students. OTGA has adopted modern methods, for example, e-learning platform, distance teaching and self-paced learning.

- Developing and implementing ODIS and its pre-cursors ODIScat and OIH: Solid work has been undertaken in the technical development of an open federated architecture. This ensures that IODE is playing a leading role in the future of oceanographic data management and exchange and is not left behind. ODIS is an architecture that can be used widely and promoted, for example, networking all major oceanographic data centres and linking with the WMO Information System (WIS 2.0).

Other activities worthy of note include OceanExpert and the IODE's Quality Management Framework.

Network of data centres (NODCs and ADUs)

The Project Office coordinates of a global network of more than 100 NODCs, ADUs and Associate Information Units (AIUs) with centres/units based in all continents. Ensuring the connection of this international network is a very important and notable achievement. This positions IODE as a key entity in the global provision and management of ocean data. It establishes a global partnership community, bringing together public institutions, private organizations, and researchers to strengthen collaboration in ocean data management.

There is good cooperation between the Project Office and Member States, helping them to achieve what they require. This is thanks to the sustained personnel efficiency of the Project Office staff and their knowledge of Member States needs.

Project Office Staff Team

The IODE system and Project Office is functioning effectively, providing a wide range of services. The Project Office has very good leadership from the Head of the Project Office, but also from the Programme Component managers. The Project Office has also attracted very competent and devoted staff and has recruited skilled new staff to meet the needs of new technology. There has been growth despite difficult economic circumstances. The Project Office staff team are very supportive of each other and there is a good working atmosphere.

The staff team is able to seek and see solutions in all situations and supports Member States in accessing marine data. They are skilled at detecting areas of opportunity for interoperability and management of marine data. They provide effective coordination in the face of a diversity of issues and objectives that must be resolved. Staff make concerted efforts to have very good cooperation with all Member States, through different methods and activities.

6. RECOMMENDATIONS

To carry out the review, 20 people were interviewed, some in person during a visit to the Project Office, the remainder through virtual meetings. This included representatives from the Project Office, present and past IODE co-chairs, IODE Programme Components, IOC (including GOOS) and the Ocean Decade. In addition, a survey of NODCs and ADUs was carried out which elicited over 50 responses.

The Project Office plays an essential role in and beyond the IOC data ecosystem through OBIS, ODIS and OTGA, and operates with great efficiency. Based on the results outlined in the report of the review of the Project Office, the reviewers identified a number of areas which the IODE Project Office should consider in the future. These are detailed below:

- (i) Importance of flagship components of IODE (OBIS, OTGA, ODIS). Restructuring the IODE work into programme components, programme activities and projects is a wise move and ensures that promoting IODE is easier to understand. This should be further developed to allow all IODE activities to link to these.

- (ii) The PO staff are excellent, competent and flexible, but they are overstretched, not only leading to stress or sick leave, but often have no time to look beyond the day-to-day work. For example, the goal of more sustainable funding and improved ability to respond to project calls needs to be facilitated by the expansion of the IODE Project Office staff, in particular on the IT side where currently staffing is very limited. Two specific issues are (i) the replacement of the Head of the Project Office which needs to be done with the minimum of delay and (ii) ensuring that the position of ODIS Programme Manager is made more stable.
- (iii) The Government of Flanders must be commended for its outstanding effort in providing funding the IODE Project Office for the last 20 years, during which time the PO has grown in responsibilities and activities. But now there is an urgent need to diversify the income stream to enable the Project Office to meet increasing demands. In addition to requesting funding from IOC Member States, others including industry and philanthropic organisations should be approached.
- (iv) It is encouraging to note that there is increasing cooperation with other parts of IOC, for example, with GOOS, Harmful Algal Blooms (HAB) and ocean acidification. This should be further encouraged to allow closer working, ensuring no 're-invention of the wheel'. More could be made of co-location with VLIZ; there are some good examples, e.g. with OBIS. Better co-working could be beneficial to both.
- (v) The BBNJ Secretariat, when established, may require the data and expertise available at the IODE Project Office in general, and IODE/OBIS in particular. This could therefore be an opportunity for the Project Office (as well as VLIZ as it has considerable complementary expertise). OBIS has been closely involved in the BBNJ process leading to the agreement and is well-recognised within the UN system.
- (vi) Location of the Project Office: there are benefits to being co-located with a marine institute and location alongside VLIZ raises the profile of Flanders. A disadvantage is that it is not so straightforward to be part of the day-to-day interactions of IOC and can be forgotten by IOC HQ in Paris. This has been partly addressed by having a member of staff located in Paris to act as liaison.
- (vii) The visibility of the Project Office is not good outside of the IODE community, and the same may be true of IODE itself. Although user demand is increasing in some areas, it is suggested that there is a broad range of users in the wider society to whom IODE and its data, products and services are very relevant. Improvements need to be made through enhanced communication and engagement with a broad range of organisations. The addition of an OBIS Community Engagement Officer is a good start in this direction. A communications plan would be beneficial for potential funders and to promote IODE data, products, and services.
- (viii) IODE is contributing to the Ocean Decade through several endorsed activities relating to OBIS, ODIS, OTGA and Ocean Best Practices (with GOOS). In addition, the Project Office hosts the Decade Coordination Office (DCO) for Ocean Data Sharing (ODS) and is hosting a series of International Ocean Data Conferences. However, there is a view that IODE could be more proactive and engage more with the Decade, in particular, through the DCO-ODS. However, this is difficult with already stretched resources.

7. OVERALL RECOMMENDATION

The overall recommendation of the reviewers is to renew the MoU between IOC and the Flanders Marine Institute on the hosting of the IOC Project Office for IODE, Oostende, Belgium.

ACRONYMS

ADU	Associate Data Unit
BBNJ	Biodiversity Beyond National Jurisdiction
BODC	British Oceanographic Data Centre
CD	Capacity Development
DCO-ODS	Decade Coordination Office for Ocean Data Sharing
DCU	Decade Coordination Unit
eDNA	Environmental DNA (Deoxyribonucleic acid)
EU	European Union
EurOBIS	European Node of the international Ocean Biodiversity Information System
FUST	Flanders UNESCO Science Trust Fund
GOOS	Global Ocean Observing System
HAB	Harmful Algal Blooms
IOC	Intergovernmental Oceanographic Commission
IODE	International Oceanographic Data and Information Exchange
ISO	International Organization for Standardization
MoU	Memorandum of Understanding
NIOZ	Royal Netherlands Institute for Sea Research
NODC	National Oceanographic Data Centre
OBIS	Ocean Biodiversity Information System
OBPS	Ocean Best Practices System
ODIS	Ocean Data and Information System
ODIScat	ODIS "Catalogue of Sources"
OIH	Ocean Info Hub
OTGA	Ocean Teacher Global Academy
PO	Project Office
UN	United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
VLIZ	Vlaams Instituut voor de Zee / Flanders Marine Institute
WIS2.0	WMO Information System 2.0
WMO	World Meteorological Organization

Annex 1 – List of Interviewees

Ms Lotta Fyrberg, Co-Chair, International Oceanographic Data Exchange (IODE), IOC of UNESCO; Oceanography/National Oceanographic Data Centre (NODC), Swedish Meteorological and Hydrological Institute (SMHI)

Dr Paula Cristina Sierra-Correa, Co-Chair, International Oceanographic Data Exchange (IODE), IOC of UNESCO; Head of Ocean Management Research and Information, INVEMAR, Colombia

Mr Gert Verreet, Advisor, Research Division Flanders Department of Economy, Science and Innovation, Belgium

Dr Ann-Katrien Lescrauwaet, Director International Relations, Vlaams Instituut voor de Zee (Flanders Marine Institute), Belgium

Dr Vladimir Ryabinin, Former Executive Secretary IOC/UNESCO and Assistant Director General of UNESCO.

Capt. Ariel Hernán Troisi, Technical Secretary, Servicio de Hidrografía Naval, Argentina; Former Chair IOC of UNESCO and former co-chair IODE, IOC of UNESCO

Dr Sergey Belov, Former Co-Chair, International Oceanographic Data Exchange (IODE), IOC of UNESCO; Deputy director, All-Russian Research Institute of Hydrometeorological Information - World Data Center (RIHMI-WDC)

Ms Alison Clausen, Programme Specialist, Marine Policy and Regional Coordination Section, IOC of UNESCO

Mr Louis Demargne, Data & Knowledge Management Officer, Ocean Decade Coordination Unit, IOC of UNESCO

Dr. Emma Heslop, Programme Specialist, GOOS, IOC of UNESCO

Mr Dan Lear, Marine Biological Association, UK, Co-chair Steering Group OBIS

Ms Katherine Tattersall, Information and Data Centre (IDC) at CSIRO National Collections and Marine Infrastructure (NCMI), Australia, Co-chair Steering Group OBIS

Dr. Claudia Delgado, Coordinator - Marine Training Unit, Marine Biology Research Group, Faculty of Sciences - Dep. Biology, University of Gent, Belgium

Selected staff of the IOC Project Office for IODE

Mr Peter Pissierssens, Head, UNESCO/IOC Project Office for IODE and IOC Capacity Development Coordinator

Ms Sofie de Baenst, Office Assistant

Mr Arno Lambert, IT Services Manager

Mr Ward Appeltans, Programme Manager, Ocean Biodiversity Information System (OBIS)

Dr Ana-Carolina Mazzuco, IODE Training Coordinator – Ocean Teacher Global Academy (OTGA) Project Coordinator

Mr Greg Reed, Consultant, OTGA and Chair Steering Group QMF

Ms Lucy Scott, Programme Coordinator, Ocean Data and Information System (ODIS) Programme Coordinator, IOC of UNESCO

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