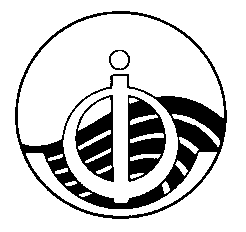
Intergovernmental Oceanographic Commission  
*Reports of Meetings of Experts and Equivalent Bodies*



**IOC Group of Experts on Capacity Development**   
  
Sixth Session

Oostende, Belgium

22-24 October 2024

**UNESCO**

IOC/GE-CD-VI/1

Oostende, 22-24 October 2024

English only

**ANNOTATED AGENDA/ DRAFT SUMMARY REPORT**

*Note: this document is written in the past tense as this document should be considered the draft report of the meeting. The document will be amended based upon discussions and decisions at the meeting.*

For bibliographic purposes this document should be cited as follows:

*IOC Group of Experts on Capacity Development (GE-CD), Sixth Session, Oostende, 22-24 October 2024.* Paris: UNESCO, XXpp, 2024. (Reports of Meetings of Experts and Equivalent Bodies, International Oceanographic Commission, 2024).

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**DAY 1 - Tuesday 22 October**

0930-1000

# **1. OPENING AND INTRODUCTIONS**

The Sixth Session of the Group of Experts on Capacity Development was held on 22-24 October 2024 at the InnovOcean Campus, Oostende, Belgium. The meeting was opened at 0930 CET by Mr Alan Evans, Chair of the Group of Experts on Capacity Development (GE-CD).

## **1.1 ADDRESS BY THE CHAIR**

Mr Alan Evans thanked all the participants for joining the sixth session of the GE-CD in-person. He highlighted the central role of capacity development in the IOC value chain as one of its core functions and how the Group contributes to the continuous improvement of the IOC capacity development programme.

## **1.2 TOUR-DE-TABLE (INTRODUCTIONS)**

Ms Johanna Diwa, IOC CD Assistant Coordinator, gave an overview of the outcomes of the GE-CD membership renewal process. She recalled that following the decision of the 57th Session of the Executive Council to renew the GE-CD and revise its Terms of Referenve in June 2024, IOC Circular Letter 3001 was issued to invite Member States to submit the information of their nominated experts including a brief biography highlighting their experience on capacity development. The IOC Executive Secretary approved the GE-CD list with 29 members. The complete list is available at <https://oceanexpert.org/group/540>. Ms Diwa asked the members to briefly introduce themselves, followed by the obervers and staff.

|  |  |
| --- | --- |
| **EXPERTS** | **MEMBER STATES** |
| [Barrientos Carlos](https://oceanexpert.org/expert/65663) | Argentina |
| [Karim Ahmad](https://oceanexpert.org/expert/30089) | Bangladesh |
| [Lescrauwaet Ann-Katrien](https://oceanexpert.org/expert/12884) | Belgium |
| [Sohou Zacharie](https://oceanexpert.org/expert/11372) | Benin |
| [Zhao Chang](https://oceanexpert.org/expert/70382) | China |
| [Correa Laura](https://oceanexpert.org/expert/70460) | Colombia |
| [Recalde Sonia](https://oceanexpert.org/expert/19916) | Ecuador |
| [El-Gharabawy Suzan](https://oceanexpert.org/expert/30384) | Egypt |
| [Lahl Rebecca](https://oceanexpert.org/expert/46954) | Germany |
| [Bonilla Mejia Italo](https://oceanexpert.org/expert/70480) | Honduras |
| [Madona Madona](https://oceanexpert.org/expert/59894) | Indonesia |
| [Al-Shawi Imad](https://oceanexpert.org/expert/70699) | Iraq |
| [O'Sullivan David](https://oceanexpert.org/expert/57608) | Ireland |
| [Fujii Masahiko](https://oceanexpert.org/expert/50089) | Japan |
| [Torres Carlos](https://oceanexpert.org/expert/19846) | Mexico |
| [Kossmann Gabriella](https://oceanexpert.org/expert/71159) | Norway |
| [Al Jufaili Saud](https://oceanexpert.org/expert/17517) | Oman |
| [Mahmood Tariq](https://oceanexpert.org/expert/70698) | Pakistan |
| [Stepanova Natalia](https://oceanexpert.org/expert/55826) | Russian Federation |
| [Eyouni Lina](https://oceanexpert.org/expert/70571) | Saudi Arabia |
| [Ndao Massata](https://oceanexpert.org/expert/24248) | Senegal |
| [Gulekana Mthuthuzeli](https://oceanexpert.org/expert/16562) | South Africa |
| [Aslanoglu Yesim](https://oceanexpert.org/expert/70905) | Turkiye |
| [Komorin Viktor](https://oceanexpert.org/expert/31716) | Ukraine |
| [Mezhoud Nahla](https://oceanexpert.org/expert/58010) | United Arab Emirates |
| [Jebri Fatma](https://oceanexpert.org/expert/56079) | United Kingdom of Great Britain and Northern Ireland |
| [Naughton Joe](https://oceanexpert.org/expert/49827) | United States of America |
| [Suarez Ana](https://oceanexpert.org/expert/51392) | Venezuela |
| [Doan Hai](https://oceanexpert.org/expert/11070) | Vietnam |

## **1.3 ADOPTION OF THE AGENDA AND TIMETABLE**

Ms Diwa invited the Group to review and adopt the provisional agenda (Document IOC/GECD-VI/ProvAgenda) available from the meeting page on <https://oceanexpert.org/event/4375#agenda>. The Group was requested to note that all working documents were made available only as on-line documents. The list of participants is attached in [Annex II](#_Annex_I.).

Ms Diwa then presented the provisional timetable and invited the Group to review and adopt the timetable (Document IOC/GECD-VI/Timetable) She informed the Group that the meeting would be held for 2.5 days from Tuesday to Thursday. The morning session will be between 0930 and 1300 and between 1400 and 1700 in the afternoon on Day 1 and Day 2 while Day 3 will end earlier around lunch time, followed by a site visit to the Marine Station afterwards.

She then reviewed the arrangements for the session and presented the list of documents available online through <https://oceanexpert.org/event/4375#documents>. She noted that the main working document for the Session would be the Annotated Agenda (this document).

She also reminded the Group that as earlier requested, the comments/questions that were received in advance were lined up for discussion at the plenary. Accordingly, as the time allotted for the discussion is limited, participants were urged to carefully read this document and the working documents in advance for the preparation for the Session.

All draft Recommendations and draft Decisions were included in the Action Paper and were briefly reviewed during the concerned agenda item for final adoption at the end of the Session.

No other business was proposed.

**The Group adopted** the agenda and the timetable. It is attached to this report as [Annex I](#_Annex_I.).

1000-1100

# **2. OVERVIEW OF GE-CD AND PAST SESSIONS**

## **2.1 GE-CD SESSIONS I-V**

This agenda item was introduced by Ms Johanna Diwa.

She gave an overview of the first five sessions of the Group and their important contributions in delivering critical work on capacity development, especially in the adoption of the new IOC Capacity Development Strategy 2023-2030.

She recalled that shortly after adopting the IOC Capacity Development Strategy (2015–2021) the IOC Assembly at its 29th Session in 2017, the IOC Assembly established the IOC Group of Experts on Capacity Development (Decision IOC-XXIX/10.1), primarily to assist the global and regional programmes with the implementation of capacity development (CD) needs assessments, the development of related work plans, mobilization of resources, and provide advice on relevant methods and tools to deliver CD.

The First Session of the IOC Group of Experts on Capacity Development was held in Paris between 21-23 March 2018. A Task Team on the implementation of a TMT/CHM "portal" and related activities was convened and held its first meeting in March 2019. The meeting discussed the results of a survey (on CD needs assessment and on the clearing house mechanism – ([IOC Circular Letter 2738](http://www.ioc-unesco.org/index.php?option=com_oe&task=viewDocumentRecord&docID=22821)) which was launched on 5 October 2018 until 14 February 2019. It focused on the three regional sub-commissions (IOCAFRICA, IOCARIBE, WESTPAC) and regional committee IOCIDIO, including SIDS.

Some of the key deliverables of the group from its first five sessions include the establishment of the CHM that resulted to the Ocean Info Hub project, the establishment and conduct of regular biennial capacity development needs survey, providing advice and assistance in various CD related initiatives with other organizations, the revision and preparation of the IOC CD Strategy 2023-2030, the development of the Ocean Capacity Development (CD) Hub among others.

The Assembly, at its 31st Session, through IOC Decision A-31/3.5.3, instructed the GE-CD to conduct a review of the IOC Capacity Development Strategy, and accordingly revised its Terms of Reference. The Assembly, at its 32nd Session, through Decision A-32/4.3, adopted the new IOC Capacity Development Strategy 2023-2030 (IOC/A- 32/4.3.Doc1).

Following the adoption of the new Strategy and the completion of the tasks of the past GE-CD membership under its revised ToR in line with the IOC Decision A-31/3.5.3, and considering the workplan related to the new Strategy, the Group agreed at the 4th session of the GE-CD that the Terms of Reference should again be revised to reflect the work required for the new IOC Capacity Development Strategy 2023-2030, including the development of an implementation plan.

## **2.2 EC-57 OUTCOMES AND INSTRUCTIONS FOR IOC33**

### 2.2.1 Revision of the GE-CD TORs

Mr Alan Evans introduced this agenda item.

He recalled that the fifth meeting of the IOC Group of Experts on Capacity Development ([IOC/GE-CD-V/3](https://oceanexpert.org/document/33973)), held from 27 to 29 February 2024, provided an opportunity to assess the work of the group and its results in support of the IOC Capacity Development Secretariat. It was proposed that the 57th session of the Executive Council renews the Group of Experts on Capacity Development (GE-CD) with revised terms of reference to reflect the continuation of the work required including the development of an implementation plan for the IOC Capacity Development Strategy to be presented to the IOC Assembly at its 33rd Session in 2025. In this way, new and existing CD initiatives and efforts supporting the six outputs (with 16 activities detailed in 31 actions) of the new IOC CD Strategy will benefit from the continued role of the Group of Experts in informing and, where relevant, assisting the CD Secretariat in implementing IOC CD activities.

The proposed revised Terms of Reference in accordance with the requirements of the new IOC Capacity Development Strategy 2023–2030, taking into account consultations with the global programmes and regional subsidiary bodies for their regional CD workplans, were presented at the 57th Session of the IOC Executive Council in June 2024. Decision IOC/EC-57/4.6 renewed the role of the GE-CD with the following revised Terms of Reference.

Decision IOC/EC-57/4.6

Implementation of the IOC Capacity Development Strategy (2023-2030)

The Executive Council,

Having examined document IOC/EC-57/4.6.Doc(1) and report IOC/GE-CD-V/3,

Recognizing the importance of Capacity Development as one of the six functions of the IOC Medium-Term Strategy (2022–2029), enabling all Member States to participate in, and benefit from, ocean research and services that are vital to sustainable development and human welfare on the planet,

Recalling the adoption of the IOC Capacity Development Strategy 2023–2030 through IOC Decision A-32/4.3,

Mindful of the role of the GE-CD in informing and, where relevant, assisting the Secretariat in implementing IOC Capacity Development initiatives,

Decides to continue the role of the IOC Group of Experts on Capacity Development and to revise its Terms of Reference as in the annex to this decision;

Annex to Dec. EC-57/4.6

**Terms of Reference**

**IOC Group of Experts on Capacity Development (GE-CD)**

The IOC Group of Experts on Capacity Development (GE-CD) is composed of experts nominated by IOC Member States responding to a call by circular letter detailing the GE-CD membership.

The IOC Group of Experts on Capacity Development (GE-CD) is responsible for the following tasks:

1. assist global and regional programmes with the implementation of capacity development needs assessments in a consistent manner;

2. also assist global and regional programmes with the development of programmatic and regionally relevant capacity development work plans based on the IOC CD strategy and related needs assessments, building on ongoing activities and making use of existing training and education facilities;

3. develop an implementation plan for the current IOC CD Strategy 2023-2030 for submission to the IOC Assembly at its 33rd session in June 2025;

4. provide advice to global and regional programmes on the implementation of the IOC Capacity Development Strategy 2023–2030 and on relevant methods and tools to improve the quality and impact of CD efforts;

5. advise the IOC CD Secretariat on the design and implementation of the biennial CD survey in close collaboration with the regions, possibly including CD implementation impact monitoring/metrics, also taking into account other methods such as regional reviews, science conferences, etc.;

6. ensure coordination of the work of the Group of Experts and its Task Teams with GOSR and CD aspects of the United Nations Decade of Ocean Science for Sustainable Development, including the Capacity Development Facility and Working Group 9 of the Vision 2030;

7. guide the further development and promotion of the Ocean CD-Hub by highlighting linkages of CD activities and collaboration opportunities between users and providers and among other global, regional and national organizations;

8. provide advice to Member States on the promotion of visibility and reach of the IOC Capacity Development Strategy 2023-2030 to assist with the planning and implementation of their capacity development efforts;

9. report results to the Assembly at its 33rd session.

**DISCUSSION/Q&A**

**The Group commended** the outputs of the previous sessions of the IOC GE-CD and noted the tasks to be delivered under the revised Terms of Reference.

**The Group noted and agreed** to deliver the tasks required in the GE-CD Terms of Reference.

**The Group was requested to** consider joining their respective Working Groups/Task Team which were to be formed on Day 2 of the meeting (see 5.1).

**The Group …**

1100 – 1130 COFFEE BREAK

1130 - 1300

# **3. IOC CD STRATEGY, CD ACTIVITIES AND NEEDS**

## **3.1 IOC CAPACITY DEVELOPMENT STRATEGY 2023-2030**

This agenda item was introduced by Ms Johanna Diwa.

She recalled that the Assembly, at its 32nd session, adopted the IOC Capacity Development Strategy for 2023–2030 together with a proposed outreach and communication plan through IOC Decision A-32/4.3. The key updates made in the strategy resulted in a slightly shortened version, removed references relating to selected projects, and were instead captured by the Ocean CD-Hub, an online compendium of CD opportunities worldwide. The Executive Summary incorporated an increased recognition that the ocean plays in political, commercial, science circles and society and the importance of capacity development in the delivery of the UN Ocean Decade. It also highlighted IOC's critical role in fostering international cooperation while using the strategy as the motivation to develop an implementation plan, such that IOC Capacity Development activities are clearly articulated and that the benefits are more readily identified.

The IOC Capacity Development Strategy 2023–2030 maintained the original six outputs, with 16 activities detailed in 31 actions. It was noted that while this framework provides general guidance on elements of capacity development, an implementation plan is yet to be developed and venues for elevating IOC's impact to the required scale to be further explored.

Ms Diwa presented the actions and decisions adopted by the Assembly through IOC Decision A-32/4.3, which includes the follow-up actions expected by the 33rd IOC Assembly in 2025.

IOC Decision A-32/4.3

**IOC Capacity Development Strategy (2023–2030)**

**and related Outreach and Communication Plan**

The Assembly,

Recognizing the importance of Capacity Development as one of the six functions of the IOC Medium-Term Strategy (2022–2029), enabling all Member States to participate in, and benefit from, ocean research and services that are vital to sustainable development and human welfare on the planet,

Recalling the adoption, at its 28th session, of the IOC Capacity Development Strategy (2015– 2021),

Noting that the current Strategy will expire in July 2023,

Noting also that through IOC Decision A-31/3.5.3, the Assembly revised the Terms of Reference of the Group of Experts on Capacity Development (GE-CD), instructing the Group to submit an updated IOC Capacity Development Strategy and a proposed outreach and communications plan to the Assembly,

Having examined documents IOC/A-32/4.3.Doc(1) and IOC/A-32/4.3.Doc(2),

Adopts the IOC Capacity Development Strategy, 2023–2030 as contained in document IOC/A- 32/4.3.Doc(1);

Adopts also the Outreach and Communications plan for the IOC Capacity Development Strategy, 2023–2030 as contained in document IOC/A-32/4.3.Doc(2);

Agrees that, by the 33rd Session of the IOC Assembly, IOC Primary Subsidiary Bodies (global programmes and Regional Subsidiary Bodies) should take the following actions:

(i) develop programmatic and regionally relevant capacity development work plans based on this strategy and related needs assessments conducted in a consistent manner, building on on-going activities and making use of existing training and education facilities;

(ii) mobilize resources in order to reinforce the Secretariat staffing of the regional Sub- Commissions, other subsidiary bodies and global programmes;

(iii) promote the visibility and reach of the IOC Capacity Development Strategy 2023– 2030 in accordance to the outreach and communications plan to reach its target audience and appreciate the document as a guide in implementing capacity development activities;

(iv) catalyze capacity development through global, regional, and national programme development; and

(v) enhance collaboration and communication between its global programmes and Regional Subsidiary Bodies, to contribute to (i) and (ii) above;

Urges IOC Member States to:

(i) identify new opportunities to participate in, and benefit from, reinforced partnerships through the IOC to achieve their capacity development goals in marine science and ocean governance;

(ii) mobilize the knowledge, personnel, infrastructural and financial resources to support IOC’s catalytic role in helping Member States achieve these goals; and

(iii) raise the visibility of IOC’s unique niche in capacity development.

Ms Diwa recalled that the 5th session of the Group of Experts on Capacity Development recommended that the global and regional programmes prepare their draft CD workplans to share in the discussions at the sixth GE-CD session in time for the 33rd Session of the IOC Assembly in June 2025. Thus the next agenda item of the meeting requested the IOC global and regional programmes to present their existing CD initiatives vis-à-vis the IOC CD Strategy. The activity aims to see where IOC global and regional programmes contribute to capacity development activities of the IOC and help identify potential initatives in areas where needs and gaps were identified. These inputs will also be considered in the preparation of the implementation plan for the IOC CD Strategy 2023-2030.

## **3.2 IOC CD ACTIVITIES AND NEEDS (GLOBAL PROGRAMMES)**

### 3.2.1 Ocean Science Section

This agenda item was introduced by Mr. Henrik Eneveoldsen, a.i. Head of the IOC Ocean Science Section. The Ocean Science section of IOC/UNESCO has developed and continues capacity development programmes for each of its core projects, namely for Harmful Algal Blooms, The International Phytoplankton Intercomparison, Ocean Acidification, Deoxygenation and Blue Carbon.

For Harmful Algae, annual courses in close collaboration with the University of Copenhagen have taken place consisting of e-learning in OTGA and practical identification, leading to an exam qualifying for the ‘IOC Certificate of Proficiency in Identification of Harmful Marine Microalgae’. The courses on Harmful algae are fully demand-driven by the Member States and primarily user funded. In-country training courses in collaboration with FAO, IAEA and IOC regional capacity development activities in WESTAPC and IOCARIBE further strengthen the IOC’s strong position on capacity development in this field.

The International Phytoplankton Intercomparison (IPI), run annually with around 90 participating laboratories by the IOC Science and Communication Centre in collaboration with The Canary Islands Harmful Algal Bloom Observatory at the University of Las Palmas de Gran Canaria, Spain, and the Marine Institute, Ireland, is a proficiency testing scheme for Phytoplankton analysts. IPI working towards accreditation as a Proficiency testing provider under ISO 17043 and ISO13528. Is also in the OTGA platform.

Ocean acidification is one of the core projects of the OSS, with IOC being the custodian agency for the Sustainable Development Goal (SDG) Indicator 14.3.1 calling for “Average marine acidity (pH) measured at agreed suite of representative sampling stations”. The OSS Secretariat has developed an online introduction course on OTGA, which has been successfully implemented in the Pacific Islands in 2022 with the support of the expert lecturers. Following high demand, the course will be repeated in different Regions, with one training taking place in Africa in 2024. New course content with regional topics and translation of the course into French and Spanish are planned. The Secretariat also runs online trainings and webinars for national agencies and IOC focal points to advance the capacity of Member States to report towards SDG 14.3.1. A capacity development strategy for the Global Ocean Acidification Observing Network (GOA-ON) and the UN Ocean Decade endorsed programme Ocean Acidification Research for Sustainability (OARS) are currently being developed together with partners, to complement ongoing efforts such as the Pier2Peer scientific mentoring programme.

The IOC working group on deoxygenation organizes monthly webinars featuring each time a junior and a senior scientist, with an average of 100 participants. Deoxygenation was the focus of one IOC summer school in September 2019, with a new edition organized in November 2023 as part of the Decade Programmes GOOD/OARS with 33 young researchers from 17 countries and more than 15 world experts in their respective fields. The next summer school is planned for Southeast Asia in 2025/2026.

For Blue Carbon, trainings are and will continue to be conducted under the framework of the GO-BC Decade programme, alongside the development of scientific training material, including an online course on the OTGA platform. Through the International Partnership for Blue Carbon (the IPBC), regular knowledge exchange session on Blue Carbon science and implementation are conducted.

### 3.2.2 Marine Policy Research (including 6.2 on Sustainable Ocean Planning and Management)

This agenda item was introduced by Ms Michele Quesada.

Ms Quesada emphasized that the main focus of the MPR work related to the IOC Capacity Development Strategy is focusing on the provision of technical assistance and capacity development support to national stakeholders and regional entities engaged in MSP in accordance with the Joint Roadmap that IOC and the European Commission adopted in 2022.

These actions focus on:

* Assessing  global capacity needs on MSP
* Delivering training related to MSP concept and thematic guidance/tools
* National support through Rapid assessment methodology to map priority actions and identify needed CD investments in MSP
* Facilitating a community of practitioners at regional and global level through MSPFora
* Development of  resources to communicate and build societal awareness on MSP

Furthermore, through the GEF IWLearn project, IOC is delivering technical and training support to GEF projects on focusing on the application of MSP in the context of the Large Marine Ecosystems approach.

Finally, the IOC Assembly at its 31st session highlighted the importance for IOC to develop a comprehensive framework to deliver knowledge and capacities to meet the needs of IOC Member States for sustainable ocean planning and management, in accordance with its Statutes, and launched the process of developing an IOC Wide-Strategy on Sustainable Ocean Planning and Management. A draft Strategy (IOC/EC-57/4.3.Doc(1).Rev. ) was presented at EC-57 and will be finalized by the IOC Working Group on Sustainable Ocean Planning and Management (IOC/WG-SOPM) during the intersessional period and presented to the  33rd IOC Assembly together with an implementation plan. One of the four strategic objectives of the Draft Strategy focuses on **Expanded capacity development for SOPM**and specificallyi)enhance stakeholder capabilities through comprehensive training programmes, workshops, information materials and ongoing education, tailored to meet the needs of diverse users and widely distributed through platforms such as Ocean CD-Hub; ii) Establish knowledge exchange platforms to effectively disseminate best practices and innovations, promoting a global community of practice that enables continuous improvement and adaptation of ocean management strategies. Additionally, engage with Early Career Ocean Professionals (ECOP) to foster hands-on learning and leadership in ocean governance and science. The IOC Expert Group is therefore invited to identify existing IOC CD services and delivery mechanism, as well as potential new initiatives, that could be developed to support the implementation of the SOPM strategy.

### 3.2.3 Global Ocean Observing System (GOOS)

This agenda item was introduced by Ms Joanna Post, Head of GOOS Section.

(Summary text to follow.)

### 3.2.4 Tsunami Resilience Section

This agenda item was introduced by Dr Laura Kong, Director of the International Tsunami Information Center (ITIC, UNESCO-IOC / NOAA). (Summary text to follow.)

Dr Kong presented the relevant actions taken by the Tsunami Resilience Section under each of the outputs, activities and actions under the IOC CD Strategy.







### 3.2.5 Ocean Decade

This agenda item was introduced by Ms Alison Clausen, Programme Specialist.

The work of capacity development as part of the Ocean Decade has been designed to align with and complement IOC’s programmatic work and the IOC Capacity Development Strategy. The strategic framework for CD as part of the Ocean Decade was developed on the basis of the former IOC CD Strategy and is harmonious with the principles and objectives of the current Strategy. Capacity development initiatives through the Ocean Decade are coordinated through the Ocean Decade Capacity Development Facility which focuses on identifying and fulfilling the needs of Decade partners for CD, with a focus on SIDS, LDCs and ECOPs. The Facility works with partners to connect existing initiatives and develop new initiatives specific to the needs of the Decade. Initial work through the Facility has focused on the development of new training initiatives for co-design and Indigenous and local knowledge and new contributions for the Facility are being solicited through regular Calls for Decade Actions.

### 3.2.6 Ocean Teacher Global Academy (OTGA/IODE)

This agenda item was introduced by Ms. Ana Carolina Mazzuco, Ocean Global Teacher Academy (OTGA) Manager.

She highlighted that UNESCO-IOC OceanTeacher Global Academy (OTGA) is an ocean training platform, supported by a global network of 17 Regional and Specialized Training Centres (RTC/STCs) and international affiliated partner institutions or programs. It benefits about 14,000 users (experts, facilitators, and learners), offering a range of learning services, and helping the global community with planning, development, and delivery of training in various formats (online, face-to-face, and blended). OTGA currently supports with coordination and management of training courses and alumni; a shared e-learning platform; creation of learning resources and activities (in ocean science, services, and management); mechanisms for connecting with experts, facilitators, and training centres; guidance on learning services procedures and standards; and training staff exchange and internships. Over the years, OTGA has been an essential element for professional training and career development in the broad ocean science community, facilitating knowledge sharing and expertise building beyond excellence centres. OTGA is a Programme Component of the UNESCO-IOC International Oceanographic Data and Information Exchange Programme (IODE) and a key action in the implementation of UNESCO-IOC CD Strategy. IODE, as the host for OTGA, is an ISO 29993:2017 certified Learning Service Provider.

She reported that in 2024, OTGA has already successfully delivered 50 included online (self-paced and instructor-led), blended, and face-to-face modes, supporting the training needs and priorities of IOC global Programmes, Regions, and Member Stated, and benefitting the broad ocean science community. Until this date (October 6, 2024), 2802 participants enrolled in these courses, and this number should increase as 11 courses more are planned until December 2024. Figures for the courses were included in the presentation, showing the increase in performance, collaboration, and global coverage.

Ms. Mazzuco addressed OTGA has liaised with IOC Programme and section leads to jointly develop and deliver training including courses with IODE (OBIS and ODIS), HAB, Tsunami Programme, Ocean Literacy, Ocean Decade, Marine Spatial Planning, and Ocean Acidification. OTGA secretariat also worked closely with IOC CD secretariat and RSB officers to provide information for the needs and priorities assessment and match-making exercise in support of the regions. OTGA and IOCAFRICA (and other partners) co-developed one blended training held in Kenya. IOCAFRICA also co-sponsored travel grants for ECOPs to attend training in Malta. Plans for a joint course in eDNA with IOCAFRICA and OBIS are under discussion for the next years.

In the context of the Ocean Decade, Ms. Mazzuco highlighted the collaborative action with: the DCU to sponsor the development of course in Indegenous and Local Knowledge; the CDF to develop training in Co-design; the DCC for Coastal Resilience to develop a course focused on business sustainability; and the ECOPs network courses focused on the young community. Likewise, many other OTGA courses target challenges of the Decade, and in 2024, OTGA secretariat built a Competency Framework to monitor this connection through the e-Learning Platform.

In preparation for ISO audits, OTGA secretariat reviewed the learning management system, updating guidelines, standards, and procedures. It includes the development and trial of a performance evaluation framework.

Ms. Mazzuco also reported that OTGA Steering Group met in Oostende from 11-13 June to: review the current status of OTGA; review the training courses delivered by the Regional and Specialized Training Centres for the last intersessional period; discuss the operations of the OTGA; discuss the Project work plan for 2024-25, including proposed courses; and discuss the future of OTGA. The agenda and outcomes of this meeting can be found in its [report](https://oceanexpert.org/document/34579). During the meeting, RTCs/STCs revised and approved a new vision for OTGA, which included as core the ongoing successful training activities and Learning Management System but adding as well blue skills, creative experiences, and shared solutions for training.

She addressed that in the past 10 years, OTGA has mainly relied on extra-budgetary funds from the voluntary contributions to UNESCO IOC from the Government of Flanders (FUST-2). OTGA Secretariat budgeted the operation and further development of the training programme and associated network for the next 5 years, following the approved 2026-2030 vision, reaching to an estimate of USD 5.000.000,00. For 2025 to 2027, OTGA has initially requested yearly USD 109.000,00 from the Regular Programme, to secure core services (management of training courses, e-learning platform, travel grants, and development of new learning materials). Programme component coordination and IT are guaranteed until 2026 from Flanders/VLIZ staff secondment. However, OTGA secretariat staff ideally should be composed of a coordinator, an operation officer, an e-learning expert, and user support assistants (administration and stakeholder engagement). Throughout the year, OTGA has participated in calls for project proposals, engaged with collaborators, and met with potential donors for resource mobilization. No core extra-budgetary funding has been secured to cover the full programme, but funding has already been confirmed for some specific training activities.

### 3.2.7 Ocean Biodiversity Information System (OBIS/IODE)

This agenda item was introduced by Ms. Elizabeth Lawrence, OBIS Capacity Development Officer.

She reported on OBIS (Ocean Biodiversity Information System) Capacity Development (CD) activities, which align with several IOC CD objectives, including:

* **Continuous Professional Development (1.2)**:
  + OBIS continuously maintains and updates the OBIS Manual (<https://manual.obis.org/>) as biodiversity data standards evolve. The Manual received a considerably major update in 2023 by the OBIS CD Officer, supported by funding from NORAD and LifeWatch ERIC.
  + OBIS released 26 YouTube video tutorials on data formatting and controlled vocabulary. These resources, along with the OBIS/OTGA online course (<https://oceanexpert.org/event/3983>), also supported by NORAD and LifeWatch ERIC, promote the development of marine biodiversity data management skills. With over 250 participants from 63 countries and 47 individuals currently certified, OBIS contributes to the global professional development of marine biodiversity experts.
  + Through the 2024 IOC Ocean Training Internships (<https://obis.org/2024/06/13/internships-2024/>), OBIS-Australia and OBIS deep-sea will host an intern to support their OBIS related data management activities which will allow interns to further develop the acquired biodiversity data skills within their home institutions.
* **Integration of Ocean Science in Basic Education (1.4)**:
  + As part of the Horizon Europe project MPA Europe (<https://mpa-europe.eu/>), OBIS developed a marine biology curriculum for elementary school students in Ostend. This initiative integrated ocean science into basic education, helping foster early interest in marine biology and environmental stewardship among young generations.
* **Facilitating access to technology and infrastructure (2.1)**
  + The OBIS CD Officer is leading a work package focusing on capacity development in the Horizon Europe project BioEcoOcean (<https://bioecoocean.org/>). The project will develop a question-based Blueprint for Integrated Ocean Sciences, with the aim to guide ocean observing programs through each step of the \*\*\*\*ocean observation value chain. OBIS will develop CD resources to support the uptake of the Blueprint, which will have specific modules targeting each step in the BioEco ocean observing value chain: from early planning stages, data collection and management, data synthesis, to product development, and application in policy and decision making. Work from this project also touches on other IOC CD activities (e.g. 2.2, 3.2, 4.1).
* **Facilitating Equitable Access to Ocean Data (2.2)**:
  + OBIS is committed to enhancing accessibility and data sharing. This is reflected in the creation of Spanish-language resources, including translations of YouTube tutorials and a Spanish version of the OBIS/OTGA online course, released October 2024 (<https://oceanexpert.org/event/4571>). These efforts, spearheaded by OBIS Colombia, OBIS Caribbean, and ESP OBIS nodes, promote inclusivity and ensure broader access to training materials.
  + The OBIS Secretariat co-organized the marine biodiversity data mobilization workshop along with OBIS-USA, IOOS, Hakai, CIOOS, MBON, OTN, Caribbean-OBIS, and OBIS-Chile (<https://ioos.github.io/bio_mobilization_workshop/>). The third annual workshop attracted over 400 applicants and included dedicated sessions for Spanish speaking participants, which further supports equitable data sharing practices.
* **Enhancing Communication between Global and Regional Programmes (3.2)**:
  + The SG-OBIS-12 (<https://oceanexpert.org/event/3965>) agreed upon a new structure and established three coordination groups (Nodes, Data, and Products) with the goal to enhance communication between the global OBIS Secretariat and the regional and thematic nodes. The OBIS Nodes Coordination group will focus on enhancing communication within the OBIS community, whereas the Data and Products Coordination Groups will also liaise with other communities, e.g. IODE, GOOS, Ocean Science, GBIF, GEO BON, TDWG, etc.
* **Encouraging Regional Leadership in Capacity Development (3.4)**:
  + Regional and sub-regional nodes have been empowered to lead capacity-building efforts, as seen in the collaborative development of the Spanish OBIS/OTGA course and training initiatives across Latin America as well as the OTGA biodiversity data management training course for Europe, organized by EurOBIS/EMODNet.
  + The newly established OBIS Nodes Coordination group is also working to strengthen and encourage regional data management capacity development in the OBIS community.

### 3.2.8 Ocean Data Information System (ODIS/IODE)

This agenda item was introduced by Ms Lucy Scott, ODIS Programme Manager.

(Summary text to follow.)

1300 – 1400 LUNCH BREAK

1400 – 1430

**DISCUSSION/Q&A**

**The Group recognized** the capacity development activities of the global and regional programmes in support of the implementation of the IOC Capacity Development Strategy 2023-2030.

1430 - 1600

## **3.3 IOC CD ACTIVITIES AND NEEDS (REGIONAL PROGRAMMES)**

### 3.3.1 IOCAFRICA

This agenda item was introduced by Mr Adewumi Ibukun, Head of IOCAFRICA Regional Secretariat.

(Summary text to follow.)

### 3.3.2 IOCARIBE

This agenda item was introduced by Ms Elva Escobar, IOCARIBE CD Coordinator.

Ms Escobar explained that Capacity Development and Ocean Literacy in the Tropical Americas and Caribbean region are crosscutting and need to be at the forefront of each of the Ocean Decade science challenges because the ocean is essential to the wellbeing of society and its economy in the region, while species loss and impacts on the water quality are evident due to the increasing use of marine ecosystems and their resources. Different UN global, regional documents and surveys have recorded existing regional differences, and in the region among Member States in terms of ocean science capacities, one example is the human and financial capacity to study and manage their deep ocean environment.

In the region capacity development efforts have been a priority since the late 1960s IOC UNESCO capacity development programs helped forming strategic research groups, graduate programs that were the building blocks for the creation of institutions in some member States of the region. This took place through visiting experts’ programs and partnering with ongoing initiatives in the region that strengthened ocean sciences for decades, however the opportunities have been limited in job creation.

The IOCARIBE Ocean Decade CD WG met several times, had workshops that recognized that long-term capacity development is required for solving major challenges posed by the impacts on the ocean. Developing local ocean sciences expertise and creating technical groups together with political will, can have long lasting benefits for a transformative change in ocean sciences in Member States of the region that coordinated with sustainable ocean economy can increase the creation of new ocean-oriented jobs required in the region.

The priority challenges identified for capacity building in the region within the framework of the IOC Capacity Development Strategy 2023-2030 include the following: funding and investment in ocean science and infrastructure, access to equipment, to research vessels and trained researchers. Additionally, a blue educational curriculum, an efficient interaction with local and indigenous communities and to foster job opportunities to avoid the brain drain are parallel tasks. Grand challenges, more complex in nature, recognized the need of building multigenerational expertise and skills, and creating ability to maintain to help achieve the outputs of the UN Ocean Decade.

Related actions undertaken in support of the implementation of the IOC CD Strategy seek to reduce the regional uneven distribution of technological and developmental capacities while tackling pollution, biodiversity loss and climate change. In the region projects that facilitate the transfer of marine technology and strengthen institutional and scientific networks in ocean sciences is needed. Actions that promote knowledge generation and sharing through an ocean literacy task group (with the Blue Schools, OTGA, the Ocean Literacy and Caribbean Indigenous Communities and the Ocean Literacy Caribbean - The Ocean and Me and seven endorsed projects) have been foreseen. A continuous capacity development program attending priority regional needs (Sargassum and harmful algal blooms, Coastal Hazard Early Warning Systems, Marine Spatial Planning) that involve scientific cooperation to strengthen science, policy and planning for sustainable oceans.

Actions that are lacking include making a transformative change that Member States can contribute to the State of the Ocean Reports in the future by reducing the persistent disparities and gaps in ocean knowledges. To achieve this in the next decades nurturing capacity building and access to oceanographic infrastructure is needed for by scientists, early career professionals and minorities.

Specific support from the IOC global ocean programs is required in the region. These should seek to develop skills, contribute to better metrics to improve the forecasting capacities to adapt to climate change, biodiversity loss, create carbon markets, or build sustainable ocean economies. However, support to implement early warning system that prevent human losses in the coastal ocean; to measure, manage and plan multiple activities at sea; and to improve education at all levels and for all ocean stakeholders is needed considering ample participation.

Collaboration and partnership with the international communities, governments, industry, research institutions can speed capacity development. These can unlock opportunities within ocean observing networks for updating abilities, developing equipment and technical groups. At sea cooperation in capacity building at sea can inspire and promote the access to data from EEZs and in ABNJ. Philanthropic financing may help support ongoing local educational programs allowing Member State research vessels to keep being operative and count with means to defray ship time for research , education and capacity building, or modernize basic equipment.

### 3.3.3 WESTPAC

This agenda item was introduced by TBC. In the absence of representation from RSB Secretariat, members from WESTPAC countries who were in the meeting were asked to provide inputs instead.

(Summary text to follow.)

### 3.3.4 IOCINDIO

This agenda item was introduced by TBC. In the absence of representation from RSB Secretariat, members from IOCINDIO countries who were in the meeting were asked to provide inputs instead.

(Summary text to follow.)

## **3.4 NEW IOC CD ACTIVITIES**

### 3.4.1 Internships

This agenda item was introduced by Ms. Johanna Diwa.

The IOC OceanTraining Internships aim to promote national and international exchange of professionals to acquire expertise related to the IOC mandate (research, services, and capacity development). Through a learning-by-doing approach, the participants have the opportunity to learn from experts in the field on a daily basis and contribute to the development of new resources fit for the global or regional community. The internships are complementary to the ongoing capacity development activities conducted by the IOC, directly linked to its global programmes. These IOC programme offices (or associated network of regional specialized centres) will host, mentor, and supervise professionals for a short training period and specific product or service delivery, to be incorporated into the current IOC infrastructure. Explicit priority is given to sponsoring the exchange of early career ocean professionals (ECOPs) from under-resourced nations (e.i., Small Development Island States and Least Developed Countries, SIDS/LDCs), indigenous communities, and other minority groups to contribute to reducing inequality in human and institutional capacity. The ultimate goal of this project is to build expertise for the Ocean, promoting collaborative opportunities for continuous professional development and lifelong learning. The internships benefit IOC Programme Offices and network specialized centres, IOC Regional Sub-Commissions, and Member States. The IOC OceanTraining Internships is a project led by IOC CD coordination office hosted by the IODE and made possible through voluntary contributions to the IOC Special Account, including NORAD.

Activities successfully delivered in 2024

(1) Coordination, development, and systematization of the exchange organization, logistics, and operations IOC CD secretariat, IODE administrative staff, and OTGA secretariat, including:

* Co-design of the general structure, flow, and timeline of the internships.
* Organization of documentation, administrative procedures, and workflow to support management and operationalization of the internships.
* Definition and publication of the Terms of Reference and guidelines for interns, mentors, and host centres.
* Launch of the call for applications from interested host institutions and mentors.
* Approval of host institutions, mentors, and respective workplans for the internship.
* Launch of the call for applications of interns.
* Selection of interns (review of applications, scoring system, criteria, and committee).
* Institutional and office support to participants during the internship.

(2) Implementation of internships: (1 October and end of December/January)

* Six institutions were selected as host institutions: two OBIS nodes (Australia and Deep-sea nodes), two OTGA Regional Training Centres (RTC ), one OTGA Specialized Training Centre and Tsunami data centre, and one NODC.
* The working plans submitted were ocean data management and tsunami resilience.
* Seven interns from seven Member States were selected as beneficiaries.
* Travel costs and up to 3 months' allowances total or partially sponsored by IOC

|  |  |  |  |
| --- | --- | --- | --- |
| **HOST INSTITUTION/**  **LOCATION** | **MENTOR** | **NAME OF INTERN** | **NATIONALITY OF INTERN** |
| [Servicio de Hidrografía Naval](https://www.hidro.gov.ar/)  Av Montes de Oca 2124  Buenos Aires C1270ABV  Argentina | [Alvaro Scardilli](https://oceanexpert.org/expert/alvaroscardilli) | Joaquin Chaves Mena (M) | Uruguay |
| [CSIRO NCMI Information and Data Centre](https://www.csiro.au/en) 3 Castray Esplanade, Battery Point, Tasmania 7004, Australia | [Katherine Tattersall](https://oceanexpert.org/expert/35925) | (Deferred to next cycle) |  |
| [INVEMAR - Marine and Coastal Research Institute in Colombia](https://www.invemar.org.co/)  Calle 25 #2-55, Playa Salguero Rodadero postal address) \* Santa Marta, Magdalena 470006, Colombia | [Carolina Garcia](https://oceanexpert.org/expert/cgv) | (Deferred to next cycle) |  |
| [Senckenberg Research Intitute and Natural History Museum](https://www.senckenberg.de/en/institutes/senckenberg-research-institute-natural-history-museum-frankfurt/)  Department of Marine Zoology, Biodiversity Information, Frankfurt am Main, Germany 60325 | [Hanieh Saeedi](https://www.oceanexpert.org/expert/31273) | Benjamin Tsirlaza (M) | Madagascar |
| [International Tsunami Information Centre](http://itic.ioc-unesco.org/index.php?option=com_content&view=category&layout=blog&id=1161&Itemid=2254) Honolulu, HI USA | [Laura Kong](https://oceanexpert.org/expert/16046) | Muhammad Harvan (M) | Indonesia |
|  |  | Taniela Takeifanga (M) | Tonga |
| [INCOIS](https://incois.gov.in/)  Indian National Centre for Ocean Information Services  "Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad, Telangana 500090, India | [PavanKumar Jonnakuti](http://pavankumar.j@incois.gov.in) | Pesahala Ranmini (F) | Sri Lanka |

Summary results of 2024 internships

The IOC Ocean Training Internships announced the start of the pilot phase of the programme in April 2024, inviting IOC Programmes and IOC Regional Sub-Commissions

to invite potential host institutions amongst IOC offices and/or associated networks. This ensured that the interns would be trained by a host institution actively working with one of IOC’s global programmes and would receive enough support and resources. Interested institutions were requested to submit complete requirements through an online application page (<https://otga.wufoo.com/forms/zna3kxa0lhkrwn/>).

The IOC Ocean Training Internships received and approved applications from 6 host institutions, including two OBIS nodes (Australia and Deep-sea nodes), two OTGA Regional Training Centres (RTC ), one OTGA Specialized Training Centre and Tsunami data centre,

and one NODC. The working plans submitted were ocean data management and tsunami resilience.

Seven interns were selected for the 2024 cohort. IOC provided financial support to cover the intern’s costs (airfare, travel and medical insurance, accommodation, and monthly allowance), allowing the project to sponsor a maximum of 6 interns. An additional intern was supported by the Tsunami programme to be hosted at ITIC Hawaii.

2025 Cycle

The 2025 cycle will be launched in early 2025 with the proposed timeline below.

January – February 2025: Call for host institutions

March 2025: Host institutions selected

April – May 2025: Call for internship applications

June – August 2025: Placements and logistics

September – December 2025: Conduct of internships

### 3.4.2 Mentorships

This agenda item was introduced by Ms. Ana Carolina Mazzuco.

She highlighted that mentoring, mostly developed by IODE, aims to foster international collaboration among NODCs, ADUs, and AIUs to develop the capacity of IOC Member States to share ocean data globally complying with quality assurance procedures and standards (reference: IODE Quality Management Framework). This mentoring responds to the needs identified by the Committee to increase the number of accredited NODCs, ADUs, and AIUs, and to provide guidance to national data centres being established or seeking accreditation. Such assistance can consist of: answering questions on "how to"; undertaking a visit to the (candidate) NODC to meet with staff and to provide advice; hosting staff of the new NODC so they can acquire the necessary hands-on experience in ocean data management; and participating as lecturer in relevant (OTGA) courses.

Ms. Mazzuco reports that in 2024, IODE actively engaged with NODCs and ADUs to develop mentoring activities, with results detailed below:

* Call for *IODE NODC mentoring: Helping other member states with the establishment of an NODC or ADU*, sent to NODC Ireland, UK, Portugal, Colombia, Argentina, India, and Malaysia on 15 March 2024.

Replies were received from Mr. Mark Hebden NODC UK, Mr. Uday Bhaskar T V S NODC India, Mr. Telmo Geraldes Dias NODC Portuguese, Mr. Alvaro Santiago Scardilli NODC Argentina, and Mrs. Ruby Ortiz NODC Colombia.

* NODCs hosting a staff of a new NODC:

NODC Argentina hosted and mentored the data manager of Servicio de Oceanografía, Hidrografía y Meteorología de la Armada de Uruguay, which is undergoing the process of creating a national oceanographic data center. Mentorship was carried out between September and December 2024 and included guidance and training on quality control standards, database operation, GIS functions, and data management. This action was co-sponsored by OTGA RP funds (USD 8000,00). It is important to highlight that NODC India, ADU OBIS Australia, and ADU OBIS-Deep Sea also hosted staff from data centres, but not with the aim of mentoring to starting a new NODC. This will be reported in item 4.3 IOC Ocean Training Internship.

* NODCs participating as a lecturer in OTGA training courses:

|  |  |  |
| --- | --- | --- |
| **NODC** | **Lecturer(s)** | **OTGA Course** |
| Argentina | Mr. Alvaro Scardilli  Mrs. Lucía Cattana  Mrs. María Eugenia Goya | Introducción a la geología y minería de fondos marinos |
| Mr. Alvaro Scardilli  Mrs. Soledad Tiranti | Observador de Hielo Marino y Témpanos |
| Belgium (VLIZ) | Mrs. Leen Vandepitte  Mrs. Katrina Exter  Mrs. Laurian Van Maldeghem  Mrs. Marie Robberecht  Mrs. Charlotte Dhondt  Mr. Ruben Perez Perez | Ocean Data Management 2024 |
| Mrs. Laura Marquez  Mrs. Leen Vandepitte  Mrs. Lynn Delgat  Mrs. Charlotte Dhondt  Mrs. Patricia Cabrera  Mrs. Carolien Knockaert  Mr. Ruben Perez  Mr. Salvador Fernandez  Mrs. Stefanie Dekeyzer  Mr. Wim Decock  Mr. Cyril Radermecker | Biological Data Management |
| China | Mrs. Wan Fangfang | Quality assurance of marine blue carbon and measurements inter-comparison |
| India | Mr. R. S. Mahendra  Mr. Prakash C Mohanty  Mr. H. Shiva Kumar  Mr. V. Chandra Sekhar  Mr. N. Kiran Kumar | Coastal Vulnerability Mapping and analysis using QGIS |
| Mr. Alakes Samanta  Mr. H. Shiva Kumar  Dr. Sanjiba Baliarsingh  Dr. Aneesh Lotliker | Ocean Colour Remote Sensing - Data, Processing and Analysis 2024 |
| Ireland | Mr. Rob Thomas | Quality Management System Essentials for NODCs and ADUs 2024 |
| Kenya | Mr. Harrison Uganda  Mrs. Mary Ontomwa | Training on the Implementation of FAIR Principles to African Marine and Coastal Data |
| Mozambique | Mrs. Clousa Maueua | Análise de dados para gestão costeira |
| United Kingdom | Mrs. Lesley Rickards  Mr. Mark Hebden | Quality Management System Essentials for NODCs and ADUs 2024 |

**DISCUSSION/Q&A**

**The Group noted the need for** more active regional consultation and coordination with the regions, through the RSBs, for equitable delivery of IOC capacity development to address the unique capacity development needs of the regions.

**The Group …**

1600 – 1630 COFFEE BREAK

1630 – 1700

# **4. ELECTION OF CO-CHAIR/S**

This agenda item was introduced by Mr Alan Evans.

He noted that the renewed Group was expected to elect their own co-chair/s at their first meeting. As requested by the IOC CD Secretariat in September, nominations were sought from the Group based on the following Terms of Reference for the C0-Chair/s.

(i) have knowledge about IOC’s CD activities and Regional Subsidiary Bodies (RSBs);  
  
 (ii) have the necessary time to carry out Chair duties (i.e. Chairing 1 in-person and between 1 and 3 online meetings/year;

(iii) consult with the IOC CD secretariat on CD work plan implementation;

(iv) contribute to the development and preparation of working documents;  
   
 (v)  participate in IOC governing body meetings (June) to report on progress of the GE-CD.

Mr Evans presented the candidacies for the Co-Chair/s of the Group based on nominations submitted to the IOC CD Secretariat. He then opened the floor for paper-based voting.

XX and XX were elected Co-Chair/s of the Group. The Co-Chair/s addressed the Group.

**The Group elected XX and XX as Co-Chair/s of GE-CD.**

**The Group expressed their heartfelt thanks** to Mr Alan Evansfor his leadership in the past GE-CD sessions.

**DAY 2, 23 October, WEDNESDAY**

0930 – 1100

## **3.5 CD PRIORITIES AND FUTURE INITIATIVES (Day 2)**

### 3.5.1 IOC-LED

This agenda item was introduced by Ms. Johanna Diwa.

At the fifth meeting of the Group of Experts on Capacity Development (GE-CD-V), all global programmes and regional sub-commissions were invited to share information on how they plan to address the six outputs of the IOC CD Strategy according to their specific regional needs and priorities. The Group recommended that global and regional programmes consider a mapping exercise to prepare regional CD workplans for discussion at the next meeting of the GE-CD. IOCAFRICA and IOCARIBE participated in this mapping exercise in close collaboration with the IOC CD Secretariat. All RSBs were invited to present the outputs of the matchmaking exercise at this meeting (see agenda item 3.3)

The exercise aims to help identify regional priority CD actions where the IOC assistance and guidance will be most needed and useful, and can also guide the development of project proposals and other new initiatives with the assistance of the IOC CD Secretariat for submission to interested donors. The RSBs were invited to propose new activities that could be (co-)funded by IOC-CD to the extent that they contribute to the implementation of the CD strategy.

### 3.5.2 JOINT COLLABORATIONS

This agenda item was introduced by Ms Mazzuco.

She recalled the recent JCB-WMO meeting discussed the need to explore future collaboration between capacity development activities of the World Meteorological Organization (WMO) and the IOC. It was proposed to start potential test cases with the Meteorology, Climatology, and Geophysical Agency of Indonesia (BMKG), Indian National Centre for Ocean Information Services (INCOIS) for OTGA and India Meteorological Department,

### 3.5.3 Other Potential Partners

This agenda item was introduced by the Co-Chair/s. The Group was requested to share information on other potential partners that the IOC might work within the delivery of capacity development initiatives.

**The Group urged** the RSB Secretariatsto study the report of this meeting and continue discussing with the IOC CD Secretariat the potential joint CD activities that can be co-funded by the IOC CD based on the needs identified in the mapping exercise while also supporting the implementation of the strategy.

**The Group decided** to share information and advice on how to approach potential partners or donors in support of the implementation of the IOC CD Strategy.

DISCUSSION/Q&A

1100 – 1130 COFFEE BREAK

1130 – 1300

# **5. ESTABLISHMENT AND DISCUSSION OF WORKING GROUPS (WG)/TASK TEAM (TT)**

## **5.1 ESTABLISHMENT OF WGs AND TT**

This agenda item was introduced by Ms. Johanna Diwa.

She recalled that the fifth session of the GE-CD proposed the establishment of Working Group on Implementation Plan and a Working Group on promotion and outreach which will guide the development and drafting of an implementation plan of the IOC CD Strategy. A

communication/outreach plan has already been approved by the 32nd Assembly of the IOC but once the Implementation Plan of the IOC CD Strategy is developed and adopted by the 33rd Assembly of the IOC June next year, another Working Group on the implementation of the communications and outreach plan needs to be established. To deliver the tasks under the new TOR of the Group (Annex Decision EC57/4.6), it was also proposed to establish a Task Team on needs assessment as required in the deliverables in view of below. Since the most urgent needs are related to the needs assessment and the implementation plan, only the WG on the Implementation Plan and Task Team on needs assessment will need to be established at this point.

|  |  |
| --- | --- |
| **GE-CD TASKS (Annex Decision EC57/4.6)** | **WG/TT** |
| 1. assist global and regional programmes with the implementation of capacity development needs assessments in a consistent manner; | Task Team to develop a “template” needs assessment methods for the use of the RSBs prior to their next sessions in spring 2025 |
| 2. also assist global and regional programmes with the development of programmatic and regionally relevant capacity development work plans based on the IOC CD strategy and related needs assessments, building on ongoing activities and making use of existing training and education facilities; | Task Team to share needs assessment results from RSBs shared with global programmes to 1) identify actions that can assist the RSBs and 2) inform IOC CD Secretariat to build a workplan or new initiatives to respond to the needs, and 3) identify areas where RSBs can work together |
| 3. develop an implementation plan for the current IOC CD Strategy 2023-2030 for submission to the IOC Assembly at its 33rd session in June 2025; | Working Group on Implementation Plan (also making use of 1 & 2 above) |
| 4. provide advice to global and regional programmes on the implementation of the IOC Capacity Development Strategy 2023–2030 and on relevant methods and tools to improve the quality and impact of CD efforts; | Working Group on Implementation Plan;  IOC CD Secretariat/OTGA |
| 5. advise the IOC CD Secretariat on the design and implementation of the biennial CD survey in close collaboration with the regions, possibly including CD implementation impact monitoring/metrics, also taking into account other methods such as regional reviews, science conferences, etc.; | Task Team on needs assessment/survey to help redesign the CD survey based on 1-4 above; IOC CD Secretariat |
| 6. ensure coordination of the work of the Group of Experts and its Task Teams with GOSR and CD aspects of the United Nations Decade of Ocean Science for Sustainable Development, including the Capacity Development Facility and Working Group 9 of the Vision 2030; | GE-CD |
| 7. guide the further development and promotion of the Ocean CD-Hub by highlighting linkages of CD activities and collaboration opportunities between users and providers and among other global, regional and national organizations; | GE-CD |
| 8. provide advice to Member States on the promotion of visibility and reach of the IOC Capacity Development Strategy 2023-2030 to assist with the planning and implementation of their capacity development efforts; | Working Group on Promotion/Outreach |
| 9. report results to the Assembly at its 33rd session. |  |

### Ms Diwa presented the expected deliverables and timeline related to the instructions for the IOC33 for the reference of the WG on IP and TT. She then asked the participants to join the WG or TT that they want to be a part of.

## **5.2 WGs/TT BREAKOUT DISCUSSIONS**

### The WG and TT had their break-out groups and discussed the following:

Task Team:

1. Elect a chair.

2. Review timeline and tasks

3. Agree on who does what and when

4. When and how to organize succeeding meetings

5. Existing tools on needs assessment, model template?

Working Group on Implementation Plan:

1. Elect a chair.

2. Review timeline and tasks

3. Agree on who does what and when

4. When and how to organize succeeding meetings

5. What is in the IP? Table of contents, structure, etc.

1300 – 1400 LUNCH BREAK

1400 – 1530

## **5.3 PLENARY REPORT FROM WGs/TT**

### Each WG/TT reported the highlights of their discussions in the plenary.

### 5.3.1 Task Team on Needs Assessments/Survey

**The members of the Task Team on Needs Assessment/Surveys are as follows:**

**The TT Chair is…**

### 5.3.2 Working Group on Implementation Plan

**The members of the Implementation Plan Working Group are as follows:**

**The WG Chair is…**

1530 – 1600 COFFEE BREAK

1600 – 1700

# **6. OTHER ITEMS/INITIATIVES**

## **6.1 CD BIENNIAL SURVEY**

This agenda item was introduced by Ms Johanna Diwa.

She recalled that the IOC Capacity Development Needs Assessment Survey had three reiterations since 2018 ([Annex VI of IOC/GE-CD-TT-I/3](https://unesdoc.unesco.org/ark:/48223/pf0000368748.locale=fr)) followed by the 2020 survey (<https://surveys.ioc-cd.org/index.php/2020-survey>) and the most recent 2022-2023 edition. All detailed responses of the survey can be found at <https://surveys.ioc-cd.org>.

Based  on the earlier version of the questionnaire used in 2018, the 2020 survey expanded overall the scope of CD stakeholder groups while the third survey sought contributions from Member States through their IOC national focal points. The online survey was opened on 4 January 2023 at <https://www.surveymonkey.com/r/JQLDQK8> and closed on 10 March 2023.

The information gathered by this survey were expected to contribute to assessing the capacity development needs in ocean science related issues and will also contribute to addressing capacity needs related to the UN Decade of Ocean Science for Sustainable Development 2021-2030.

At the GE-CD-V, the Group provided some recommendations for the next iteration of the IOC CD needs assessment survey for 2024-2025. Given the low response rate, the close engagement and involvement of the regional secretariats in the design and conduct of the survey was underlined to capture specific CD needs in their respective regions. It was also proposed to seek inputs from the global and regional programmes on a list of stakeholder groups that will be ideal respondents in the survey. Finally, the Group proposed collaboration with other survey requirements of other programmes such as e.g. GEBCO, CD Facility, Ocean Policies, GOSR, SOPM, etc., that can be integrated in the survey. etc.

A small Task Team on needs assessment/survey (See 5) is expected to help in the redesign of the IOC CD biennial needs assessment survey based on the outcomes of their work with the RSBs.

## **6.2 Sustainable Ocean Planning and Management (SOPM)**

Discussed under 3.2.2.

## **6.3 Biodiversity Beyond National Jurisdiction (BBNJ) Agreement**

This agenda item was introduced by Ms Johanna Diwa.

Ms Diwa recalled that on 19 June 2023, the Conference adopted, by consensus, the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction ([A/CONF.232/2023/4](https://undocs.org/Home/Mobile?FinalSymbol=a%2Fconf.232%2F2023%2F4&Language=E&DeviceType=Desktop&LangRequested=False)) (<https://www.un.org/bbnj/>).

She referred to the potential IOC services related to the BBNJ Agreement in the following areas:

**Marine genetic resources**

* + Access to MGR-related data and information (OBIS)
  + Pacific Islands Marine Bioinvasions Alert Network (PacMAN): *Build capacity on MGR-related technologies related to bioinvasions*

**Area-based management tools**

* + Marine spatial planning: MSP Global Initiative, includes transboundary MSP
  + GEF funded IW:LEARN program working with Large Marine Ecosystem (LME) projects: *Possibility for transboundary pilot projects, as LMEs can extend into ABNJ*

**Environmental impact assessments (EIA)**

* + Scientific observation data IODE systems are used for EIAs and environmental assessments
  + Data from OBIS, the World Ocean Database, and the IODE network *provide a source of data for EIAs, including in ABNJ*

She shared that the new UN Treaty will require a data and information system, or clearing-house mechanism to manage and access data and information related to the various elements of the agreement including:

1. Capacity building and transfer of marine technology (CBTMT)
2. Area-based management tools including marine protected areas
3. Environmental impact assessments
4. Marine genetic resources.

To produce the basis for delivering meaningful and integrated information at global scale, the BBNJ CBTMT system would need to address access to existing bodies of data, as well as facilitate coordinated entry of new in-situ and other data relevant to the treaty.

Over the past decades, IOC/UNESCO has successfully designed, operated, and connected a network of data and information systems to assist the global community to discover, understand, and manage life in the sea. IOC Ocean data infrastructure interoperates with existing data bodies to provide free and open access to marine biodiversity data through the Ocean Biodiversity Information System ([OBIS](https://obis.org/)), the largest clearinghouse of its kind, also facilitating the connection with other spatial ocean data hubs through the Ocean Data and Information System ([ODIS](https://oceaninfohub.org/odis/)). These systems, data portals, and associated networks of specialized centres deliver several marine biodiversity data products and services, applied to address a wide range of uses and multiple stakeholders (e.g., [knowledge generated using OBIS datasets](https://obis.org/library/)).

**2. Overall purpose (objectives) and relevance: needs and issues:**

The IOC is a recognized competent UN body for CD/TMT and with the current developments under its Ocean Data and Information System (ODIS), IOC is also well positioned to support the to be established BBNJ secretariat by further development and expansion of its data system, and to provide technical support for the CHM managed by the BBNJ secretariat. The IOC-UNESCO Criteria and Guidelines on the Transfer of Marine Technology can provide the guidance and substantive scope of technology needs assessments including its capacity development needs assessment based on its experience from its successful initiatives.

This pilot project intends to demonstrate the utility of the Ocean Data and Information System infrastructure, to support the needs of a **Biodiversity Data Hub for the High Seas.**

**3. Implementation strategy:**

The **Biodiversity Data Hub for the High Seas** will build on technology developed under the Ocean InfoHub project and will develop a demonstrator for several elements of the BBNJ Clearing-House Mechanism.

This project **will not develop the BBNJ-CHM**, but will use ODIS technology in a pilot project to demonstrate how it can serve a future BBNJ CHM:

**Part 1: Development of a pilot biodiversity hub (*this section is under revision given the amended budget*)**

ODIS/OIH currently possesses the capability to function as an information hub for discovering and accessing a diverse range of information, including documents, reports, and training opportunities related to various aspects of BBNJ. Nevertheless, there is room for enhancement in both the Linked Open Data specifications and the back- and frontend of ODIS/OIH. This improvement aims to fine-tune the system and create a BBNJ hub or interface on ODIS.

This interface will enable Member States and a prospective BBNJ Secretariat to register, monitor and effectively manage diverse information sources. This includes tasks such as classification or flagging, quality assurance and compliance, among others. Once published, these resources will be easily findable and accessible. Additionally, users will have the capability to receive notifications about new resources, enhancing the overall functionality of the platform.

Furthermore, a consultant will craft comprehensive guidelines and training materials for Member States, ensuring the publication of BBNJ-relevant information in a manner compliant with ODIS standards. This includes the proper registration of these resources in a dedicated 'BBNJ' registry (i.e. the ODIS Catalogue). The consultant will also develop outreach and communication material.

**Part 2: Desktop study on CHM requirements and solutions related to Marine Genetic Resources (*this section is under revision given a White Paper just released on MGR*)**

Managing data and information related to Marine Genetic Resources (MGR) is complex and requires the involvement of various existing organizations. A consultant will conduct an in-depth study to explore the essential elements for the MGR component of the BBNJ CHM, identify the major stakeholders and recommend technical solutions. The results of this comprehensive study will provide a plan including resource requirements to develop an MGR hub as part of ODIS/OIH.

**The Group recommended the Task Team on Needs Assessment/Survey** to halp redesign the CD biennial survey based on their work on needs assessment methods with RSBs (also discussed under 5.2.2.)

**The Group noted** the related services of the IOC capacity development in the CBTMT/CHM requirement of the BBNJ package and expressed support in the project “Biodiversity Data Hub for the High Seas”.

**DAY 3, 24 October, THURSDAY**

0930 – 1030

# **7. ANY OTHER BUSINESS**

To be updated based on the discussions.

# **8. WORKPLAN FOR THE INTERSESSIONAL PERIOD**

To be updated based on the discussions.

|  |  |  |  |
| --- | --- | --- | --- |
| **ACTIVITY** | **ASSIGNED ROLES/LEAD** | **TIMELINE** | **RESOURCES** |
| *As discussed under agenda 2, 3 and 5, the following tasks relating to instructions for the IOC-XXXIII Assembly:* | | | |
| Develop needs assessment ‘template’ | TT on Needs Assessment/Survey | November – December 2024 | TT online meeting/s |
| Working Group to start developing structure/table of contents for the implementation plan | Implementation Plan Working Group (IP) | November – December 2024 | WG online meeting/s |
| RSBs completed inpts on needs assessment templates | RSB Secretariats;  IP Working Group | February 2025 |  |
| Draft Implementation Plan | Global Programmes; IP Working Group | April 2025 |  |
| Review and approval of the implementation plan | GE-CD | April 2025 | GE-CD Online meeting |
| Preparation for submission of Implementation Plan to the IOC-33 Assembly Secretariat | IOC CD Secretariat (Johanna Diwa) | May 2025 |  |
| Presentation of the Implementation Plan at the IOC-33 | Co-Chair/s  IOC CD Secretariat (Johanna Diwa) | June – July 2025 | Arrangements for IOC-33 |
|  |  |  |  |
| *As discussed under agenda 6.1:* | | | |
| Redesign CD biennial survey | TT on Needs Assessment/Survey  CD Secretariat | April – May 2025 |  |
| Organize CD biennial survey | GE-CD  CD Secretariat | June – July 2025 |  |
| Implement CD biennial survey | RSBs Secretariats  IOC CD Secretariat | August – October 2025 |  |

**The Group adopted the workplan** for the next intersessional period.

1030 – 1100 COFFEE BREAK

1100 – 1200

# **9. MEETING REPORT AND CLOSING**

Ms Johanna Diwa circulated the draft summary report for the review of the Group and presented the action items (yellow highlights in this document) for the review of the Group.

**The Group adopted the decisions and requested** the Secretariat to finalize the report and upload for circulation.

The Co-Chair/s thanked the GE-CD members and all the participants for their active participation in the meeting. They closed the meeting at XX.

1200 - 1300 LUNCH BREAK

1300 depart for VLIZ Marine Station Station

1330 onwards

FIELD VISIT Site: VLIZ Marine Station

# **ANNEXES**

Annex I. Agenda

Annex II. List of Participants

## Annex I.

**INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION**

(of UNESCO)

**Sixth Session of the IOC Group of Experts on Capacity Development (GE-CD-VI)**

**IOC Project Office for IODE, Oostende, Belgium**

**22-24 October 2024**

**PROVISIONAL AGENDA**

**DAY 1, 22 October, TUESDAY (CET)**

0930 - 1000

1. **OPENING AND INTRODUCTIONS**

1.1 ADDRESS BY THE CHAIR

1.2 TOUR-DE-TABLE (INTRODUCTIONS)

1.3 ADOPTION OF THE AGENDA AND TIMETABLE

1000 - 1100

2. **OVERVIEW OF GE-CD AND PAST SESSIONS**

2.1 GE-CD SESSIONS 1-5

2.2 EC57 OUTCOMES AND INSTRUCTIONS for IOC-33

2.2.1 Revision of the GE-CD TORs (WGs and TTs, see under 4.1)

DISCUSSION/Q&A

1100 – 1130 COFFEE BREAK

1130 - 1300

3. **IOC CD STRATEGY, CD ACTIVITIES AND NEEDS**

3.1 IOC CD STRATEGY 2023-2030

3.2 IOC CD activities and needs (global)

3.2.1 Ocean Science Section (OSS)

3.2.2 Marine Policy Research (MPR)

3.2.3 Global Ocean Observing System (GOOS)

3.2.4 Tsunami Resilience Section (TSR)

3.2.5 Ocean Decade

3.2.6 Ocean Teacher Global Academy (OTGA/IODE)

3.2.7 Ocean Biodiversity Information System (OBIS/IODE)

3.2.8 Ocean Data Information System (ODIS/IODE) (Also see 6.3)

1300 – 1400 LUNCH BREAK

1400 – 1600

DISCUSSION/Q&A

3.3 IOC CD activities and needs (regional)

3.3.1 IOCAFRICA

3.3.2 IOCARIBE

3.3.3 WESTPAC

3.3.4 IOCINDIO

3.4 New IOC CD Activities

3.4.1 Internships

3.4.2 Mentoring

DISCUSSION/Q&A

1600 – 1630 COFFEE BREAK

1600 - 1630

4. ELECTION OF CO-CHAIR/S

**DAY 2, 23 October, WEDNESDAY**

0930 - 1100

3.5 CD Priorities and Future Initiatives

3.5.1 IOC-Led

3.5.2 Joint Collaborations (BMKG, INCOIS, WMO, etc)

3.5.3 Other Potential Partners/Funders

DISCUSSION/Q&A

1100 – 1130 COFFEE BREAK

1130 – 1300

**5. ESTABLISHMENT OF WORKING GROUPS/TASK TEAM**

5.1 Establishment of WGs and TT

5.2 WG Breakout Discussions

5.2.1 Task Team on Needs Assessments/Survey

5.2.2 Implementation Plan Working Group

1300 – 1400 LUNCH BREAK

1400 - 1530

5.3 Plenary Report from WGs/TT

5.3.1 Task Team on Needs Assessments/Survey

5.3.2 Implementation Plan Working Group

DISCUSSION/Q&A

1530 – 1600 COFFEE BREAK

1600 – 1700

**6. OTHER ITEMS/INITIATIVES**

6.1. CD Biennial survey

6.2. Sustainable Ocean Planning and Management (SOPM) (under 3.2.2)

6.3. Biodiversity Beyond National Jurisdiction (BBNJ) Agreement)

DISCUSSION/Q&A

**DAY 3, 24 October, THURSDAY**

0930 – 1030

**7. ANY OTHER BUSINESS**

**8. WORKPLAN FOR THE INTERSESSIONAL PERIOD**

1030 – 1100 COFFEE BREAK

1100 – 1200

**9. MEETING REPORT AND CLOSING**

1200 – 1300 LUNCH BREAK

1330 ONWARDS

**Field Visit: VLIZ Marine**

Annex II. **LIST OF PARTICIPANTS (to be completed after the meeting)**