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*Reports of Meetings of Experts and Equivalent Bodies*



**IOC Group of Experts on Capacity Development**

Fifth Session

Paris, France

27-29 February 2024

**UNESCO**

IOC/GE-CD-V/1

Paris, 27-29 February 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.*

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Table of Contents

[1. OPENING OF THE MEETING 3](#_Toc158235246)

[1.1 ADDRESS BY THE CHAIR 10](#_Toc158235247)

[1.2 ADOPTION OF THE AGENDA 10](#_Toc158235248)

[1.3 ADOPTION OF THE TIMETABLE 10](#_Toc158235249)

[2. REPORT ON STATUS OF GE-CD-IV WORKPLAN 11](#_Toc158235250)

[2.1 OCEAN INFOHUB PROJECT 11](#_Toc158235251)

[2.2 OCEAN CD-HUB PROJECT 15](#_Toc158235252)

[2.3 CAPACITY DEVELOPMENT SURVEY 15](#_Toc158235253)

[3. 32ND SESSION OF THE IOC ASSEMBLY (2023) OUTCOMES AND INSTRUCTIONS 20](#_Toc158235254)

[3.1 IOC CD STRATEGY 2023-2030 20](#_Toc158235255)

[3.2 PUBLICATION AND OUTREACH 22](#_Toc158235256)

[3.3 REVISION OF THE GE-CD TORs 22](#_Toc158235257)

[4. IOC CD STRATEGY IMPLEMENTATION 22](#_Toc158235258)

[4.1 GLOBAL PROGRAMMES 22](#_Toc158235259)

[4.2 REGIONAL PROGRAMMES 25](#_Toc158235260)

[4.3 OTHER PROPOSALS 27](#_Toc158235261)

[4.4 EMERGING INITIATIVES 27](#_Toc158235262)

[5. UN OCEAN DECADE 31](#_Toc158235263)

[5.1 DECADE CD FACILITY 31](#_Toc158235264)

[5.2 WG9 VISION 2030 31](#_Toc158235265)

[6. RECONSTITUTION OF GE-CD 31](#_Toc158235266)

[6.1 2024 GE-CD RENEWAL PROCESS 31](#_Toc158235267)

[6.2 GE-CD CHAIRMANSHIP 31](#_Toc158235268)

[ANNEXES 33](#_Toc158235269)

[Annex I. AGENDA 34](#_Toc158235270)

[Annex II. LIST OF PARTICIPANTS 35](#_Toc158235271)

**DAY 1 - Tuesday 27 February**

1000-1015

# **1. OPENING OF THE MEETING**

The Fifth Session of the Group of Experts on Capacity Development was held on 27-29 February 2024 at the UNESCO-IOC Headquarters in Paris, France. The meeting was opened at 1000 CET by 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 fifth session of the GE-CD and highlighted the important role of the Group as capacity development plays a central role as one of the core functions of the IOC. He looked back at the first four 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.

## **1.2 ADOPTION OF THE AGENDA**

Ms Johanna Diwa, IOC CD Secretariat, introduced the provisional agenda of the meeting ([Annex I](#_Annex_I.)). She invited the Group to review and adopt the provisional agenda available from the meeting page on <https://oceanexpert.org/event/4043#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 as Annex II.

No other business was proposed.

**Proposed Action: The Group adopted** the agenda**.**

## **1.3 ADOPTION OF THE TIMETABLE**

Ms Diwa then presented the provisional timetable and invited the Group to review and adopt the timetable ([Document IOC/GECD-V/1 Timetable](https://oceanexpert.org/document/33874)) She informed the Group that the meeting would be held for 2.5 days from Tuesday to Thursday. The morning session will be between 1000 and 1300 with 30-minute coffee break and then between 1500 and 1630 in the afternoon on Day 1 and Day 2 while Day 3 will end at 1230.

She then reviewed the arrangements for the session and presented the List of Documents available online through <https://oceanexpert.org/event/4043#overview>. She noted that the main working document for the Session would be the Action Paper (this document).

She also reminded the Group that a zoom connection is arranged for this meeting. She informed the Group that as earlier requested, the comments/questions that were received from the advance perusal of the Action Paper 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 Action Paper and 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.

**Proposed Action:: The Group adopted** the timetable for the session**.**

1015-1100

# **2. REPORT ON STATUS OF GE-CD-IV WORKPLAN**

This agenda item was introduced by Mr Alan Evans. He referred to the workplan discussed at the 4th Session of the GE-CD [(Document IOC/GECD-IV/Fin. Report)](https://oceanexpert.org/document/33795) and asked the Secretariat to report on the status of tasks related to Ocean Info-Hub, Ocean CD-Hub and the IOC Capacity Development Needs Assessment Survey.

## **2.1 OCEAN INFOHUB PROJECT**

This agenda item was reported by Lucy Scott.

She recalled that 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.

All regions reported that such a mechanism would be instrumental to the further development of ocean science capacity in the countries. All regions expressed preference for an online central portal integrating the data and information harvested from regional/sectoral CHM portals. The respondents identified the need for a **series of nodes** rather than one global central node but using technology that allows **interoperability** between the nodes. The majority of respondents had recommended a “A hybrid model: online central portal with deep-links to regional/sectoral CHM portals”.

Based on this, INVEMAR (Colombia) developed a pilot CHM for the Latin America and Caribbean region, in the context of the Caribbean Marine Atlas (CMA-II) project. The pilot “Clearing-House Mechanism LAC) (<http://portete.invemar.org.co/chm>) is a hybrid model, with a centralized portal that provides access to information sources identified by the users as most relevant (Databases on Training and Education resources, List of experts, Research vessels,..) and integrated from a number of existing web sources developed and maintained under IOC (OceanExpert, Ocean Teacher Global Academy, ODISCat)

From these and several other preparatory activities, the OIH Project was designed and approved and was implemented, starting in April 2020, funded by the Government of Flanders (Kingdom of Belgium).

1. **Challenges identified**
* A proliferation of online sources of data and information
* A diversity of online data systems
* Member states may have very valuable and useful resources, but they are difficult to find
* Global data and information resources have useful content, but local users might not know about them
* Challenges of trust in some regions
1. **The objective of the OIH Project is to:**
* respond to the global challenges of understanding and managing marine ecosystems in a rapidly changing world
* develop interoperability between existing information systems, thus improving the flow of information to end users.
* Improve access to marine and coastal data for multiple purposes, but especially to inform sustainable management and informed policy development.
* Facilitate equitable access to Ocean information and knowledge products
* By harnessing digital revolutions, and facilitating the sharing of new technologies between countries and institutions
* Connect independent digital initiatives to form a diverse, but interoperable and inclusive, Ocean Data and Information System.
* Challenges of access to technology, access to other resources

The overall aim was proof of concept.

1. **This was undertaken through the following approach:**

We worked with a number of founding partners, including the University of Ghent, WIOMSA, SPREP, SPC, EUROCEAN, EMODNET and other sister projects within IODE :

* + Ocean and Data information system Catalogue of data sources (ODISCAT),
	+ OceanExpert : People, institutions and events
	+ AquaDocs : Documents and Publications
	+ The GOOS/IODE Ocean Best Practices System (OBPS)
	+ The Ocean Biodiversity Information System (OBIS)

We also worked within three pilot regions:

* Africa,
* Latin America and the Caribbean,
* Pacific Small Island Developing States
1. **What was developed:**

 **4.1 The ODIS-architecture**

The OIH Project thus developed the first phase of the architecture underpinning the Ocean Data and Information system (ODIS-arch), together with partners and user communities, in a co-design process.

ODISlinks partners, or nodes through a lightweight, schema.org based, decentralized interoperability architecture. As with natural ecosystems, ODIS will be resilient to the gain or loss of parts, and accommodate a high diversity of products and services, while maintaining its core functions.

The data are labelled according to different patterns or specifications, created based on the focal areas of the IOC and requests from its community of users (e.g. for sensors and instrumentation, software applications, event series, EOVs).

It was an important objective, in working with existing systems, that the barriers to joining be LOW and that we should not require re-design of any existing systems.

And these are all explained fully in the online, openly accessible Documentation [https://book.oceaninfohub.org](https://book.oceaninfohub.org/?_ga=2.259810505.2141234701.1632318930-1206114531.1612510412)

 **4.2 Regional and thematic working groups, and communities of practice**

* Although we first worked with global IOC partners and our three pilot regions, we gradually expanded over time so that now we are engaging with over 90 organisations at some level, to enable them to expose their metadata and to join the growing network, and continue the ongoing process of co-design.
* The ODIS-architecture has been established and currently indexes 32 databases from 28 partner organisations these 32 nodes are contributing openly discoverable content to the Ocean InfoHub knowledge graph.
* With the assistance of co-financing from NORAD, we have been able to work beyond the three initial focus regions and bring in additional partners.
* Many other data-sharing initiatives work primarily in Europe or North America, but the Ocean InfoHub and ODIS is demonstrating interoperability between highly diverse themes, regions, and capacities across the globe.

 **4.3 An Ocean InfoHub Global Search portal** has been developed as a demonstration of ODIS (<https://oceaninfohub.org>). The portal currently (December 2023) contains over 130,000 content items in seven content categories: (i) Experts (27,000); (ii) Institutions (13,000; (iii) Documents (42,000); (iv) Training (1,500); (v) Vessels (113); (vi) Projects (3,600); and (vii) Datasets (48,000).

 **4.4 Cross domain interoperability technology**

Other UN agencies, global data systems, and initiatives in other domains and sectors have also expressed an interest in adopting the ODIS technology.

We discussed interoperability solutions with organisations including GEO BON, the Helmholtz Metadata Collaboration (HMC), the Earth Science Information Partners (ESIP), and the Polar Data Discovery Enhancement Research (POLDER) project). OIH/ODIS is also a case study in the ongoing WorldFAIR project representing the ocean domain in a constellation of 11 case studies

Underpinning all these activities, are our capacity development activities, contributing also to the IOC’s CD strategy.

1. **The Ocean InfoHub, through ODIS, now** **provides a:**
* **Sustainable, interoperable, inclusive,** and **openly accessible ODIS infrastructure**
* Composed of **nodes**, through which data providers and partners can share (meta) data
* Does not depend on a central Hub, the **web** is our **collective Hub;**
* **Nodes have complete ownership and control, and choose** which metadata they would like to share.
* Anyone can develop thematic or regional **portals**.
* Provenance is maintined: linking back to the **original, authoritative source**
* Architecture is a **lightweight**, minimal layer and workflows should not need to change.
1. **OIH Project contributions to the IOC CD strategy**
* The OIH is needs driven, with investment in tools that have been requested by regions
* The OIH will optimise the exchange of knowledge, information and learning
* It responds to national and regional priorities
* It will respect cultural and geographic diversity (regional identity of hubs, including language)
* Targets knowledge generators and users
* Builds on and strengthens existing resources
* Focuses on the transfer of local knowledge,
* on supporting early career scientists,
* and on remedying gender disparity by increasing access to information, technologies and opportunities.
* Facilitates equitable access to Ocean metadata.
* The low barriers to joining enable the inclusion of very simple, to highly complex systems.

Our partnership with OTGA is very important. To reach the thousands of partners that we would ultimately need to connect to, bilateral and in-person training is just not practical. We have our online documentation, and we have also been developing a Getting Started Toolkit for ODIS, which will be instrumental in getting new partners on board, to be used in conjunction with our online documentation, OTGA courses and hands-on bilateral meetings.

The IOC/OTGA/OIH Training course: **Implementing the Ocean Data and Information System (ODIS) architecture** was held in 2021 in English and then in 2023 in four languages.

It was held online over a week-long period, and then made available as a self-paced course. [9 courses in total]

* 2021: 59 in English
* 2023: 81 across English, Spanish, Portuguese, French

We have worked closely with the International Coastal Atlas Network (ICAN), to support GeoNode training in association with the activities supporting the African Coastal and Marine Atlas.

We do bilateral training as we have a consultant on board who holds 1:1 meetings with partners to walk them through the joining process. This also has a two way feedback as he uses the interactions to improve the documentation as well as to develop a Getting Started manual that is currently in process.

OIH has supported the three pilot regions in the specific ways they wanted to link to OIH.

INVEMAR has a regional node of OIH, which links to datasets from 12 countries in the LAC region as well as regional partners that include CLME+ Training and Capacity Development Portal, The Sargassum Information Hub and the Caribbean Marine Atlas.

Africa has developed three thematic portals that link to the global OIH, and the Pacific has linked its two existing regional portals to OIH.

The project’s open-source philosophy ensures its software and extensive documentation is available online, promoting reuse and adaptation by any institution, whether or not they are an OIH project partner. This will build resilience and sustainability of ODIS as it becomes adopted and implemented by more partners beyond the life of the OIH Project.

The Ocean InfoHub Project and ODIS have already succeeded in creating a self-sustaining network of partners, but there remains much work to do to widen the collaboration to other regions and nations, build capacity and digital equity in regions with low resourcing, and continually upgrade the capabilities of the network.

1. **The Future**

ODIS offers a **long-term solution for NODCs, ADUs and new partners** to keep ownership and complete control over their data holdings, while choosing which (meta)data to share with a growing global ocean digital ecosystem.

The OIH Project will close in June 2024 but the ODIS Programme will continue to support core services seamlessly with IODE RP funding. OIHAfrica will also continue with RP funding and resources will be actively sought for other regions and further development of ODIS.

1. **Links to the UN Decade of Ocean Science for Sustainable Development**

A Programme called An Ocean Data and Information System supporting the UN Decade of Ocean Science for Sustainable Development (OceanData-2030) has been registered with the UN Decade for Ocean Science for Sustainable Development.

The “ocean digital ecosystem” concept promoted and developed through OIH/ODIS is adopted also by the UN Decade of Ocean Science for Sustainable Development and is referred to in the “Data & Information Strategy for the UN Ocean Decade”. A Decade Coordination Office (DCO) for Data Sharing, is hosted by the IOC Project Office for IODE, Oostende, Belgium

**DISCUSSION**

**PROPOSED ACTION:**

**The Group noted** the developments made by the OIH project and its integration into the ODIS/OIH Programme following the end of the project in June 2023.

## **2.2 OCEAN CD-HUB PROJECT**

Ms Johanna Diwa introduced the agenda item.

She recalled that in response to a request made at the First Meeting of the Working Group on the Revision of the IOC CD Strategy *to develop a compendium of CD activities by other global and regional programmes, UN specialized agencies, intergovernmental organizations, non-governmental organizations and national aid programmes, etc. to be maintained as an online portal* ([Document IOC/GECD/WG Strategy/1](https://oceanexpert.org/document/30962)), the IOC Ocean Capacity Development Hub ([oceancd.org](https://oceancd.org/)) was launched last year.

In developing the Ocean CD-Hub, it was recognized that what was needed for equitable capacity development is an online central database to help individuals and organizations access information about existing capacity development opportunities around the world. Bringing these information together from various resources and organizations offering these opportunities, and putting them in one place for easier search and retrieval of CD opportunities, contribute to an increased access to information on CD programmes for the wider range of users from various stakeholder groups.

The home page lists 13 buttons representing different categories of CD Activities which also correspond to the outputs, actions and activities in the IOC CD strategic framework such as training and higher education, onboard expeditions, research and training, fellowships, internships, mentorships, visiting lecturers, visiting scholars and exchanges, professional networks and community building, awards, travel grants, access to infrastructure, ocean literacy public information and communication among others.

A simple user-friendly platform that contains information on ongoing continuous CD programmes offered by national, regional and global organizations. It is important to note that the CD Hub does not provide details on individual training courses instead it lists important information that leads to the webpage or contact person in charge of the activity.

As the Ocean CD-Hub is continuously and regularly updated with new entries as opportunities are shared and discovered, we hope that the region and the member states will benefit from this platform, not only in searching for available CD opportunities but also in identifying synergies and potential partnerships between and among different organizations.

This way, we can mutualize resources and capitalize on existing expertise in the region. This is very useful, especially in matchmaking efforts where we do not only look at the needs but also recognize what capacity already exists and what opportunities are already available in the region so we can tap for potential partnerships or collaboration. This can contribute more not only to Global North to Global South but also, Global South-to-South capacity development.

One of the improvements made in the platform is the ability for contributors to add their own entries anytime by logging in the system using their Ocean Expert credentials. Additional improvements such as making the page more interactive are being planned for the new biennium, including the expansion of the entries to include the CD elements of the Decade and contribute to matchmaking efforts of CD needs and opportunities available.

In promoting the Ocean CD-Hub, some webinar series were organized and conducted starting with IOCARIBE last year. A brief demonstration was provided to various stakeholder groups in the region to show how entries can be accessed, and filtered depending on the specific needs of the user groups. It is envisioned to organize and conduct more webinars and demo sessions with other regions, to further promote the use of this tool.

**DISCUSSION**

**PROPOSED ACTION:**

**The Group noted** the developments made in the Ocean CD-Hub and urged the global and regional programmes to promote the use and reach of the tool especially in matchmaking efforts of capacity development priorities in the regions.

## **2.3 IOC CAPACITY DEVELOPMENT NEEDS ASSESSMENT SURVEY**

This agenda item was introduced by Ms Johanna Diwa.

She recalled that the IOC Capacity Development Needs Assessment 2022 Survey was the third iteration of the biennial exercise which started in 2018 ([Annex VI of IOC/GE-CD-TT-I/3](https://unesdoc.unesco.org/ark%3A/48223/pf0000368748.locale%3Dfr)) followed by the 2020 survey (<https://surveys.ioc-cd.org/index.php/2020-survey>).

 **1. Background**

As instructed by the 31st Session of the IOC Assembly (2021) the IOC GE-CD has implemented the revised 2022 CD survey. Informed by the experience and learnings from the first two versions of the CD Needs Assessment Survey, the 2022 survey questionnaire was closely reviewed and revised in close collaboration with the GOSR team as recommended by the Fourth Session of the GE-CD. While the GOSR Ocean Science Tracker aimed to collect basic information on current ocean science capacity in a given country, the Capacity Development Needs Assessment Survey was organised to assess the capacity development requirements of member countries in order to contribute to the implementation of the IOC CD Strategy.

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. Some respondents who had difficulty accessing the online questionnaire requested for pdf copies of the questions. These were submitted to the Secretariat and manually encoded their responses in the database.

The CD Needs Assessment survey consisted two main parts: the first was for personal information of the respondents, while the second part contained questions focusing on capacity development based largely on the IOC CD Strategy framework of outputs and activities. The survey was actively promoted through joint Circular Letter 2919 in English, French and Spanish. 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.

 **2. Results**

The survey sought official representations with only one national authorized response, thus only IOC National Focal Points were targeted as respondents. They were encouraged to submit consolidated responses through internal consultation so as to submit only ONE national response per Member State. Responses came from 17 out of 150 IOC member states (11%); 13 out of 115 developing country IOC member states (12%).

From responses received from 17 countries as of April 2023, the gender breakdown was 56% male, 44% women.  Each Member State of the IOC has one or more official contact points who receive all official communications from the Commission. The IOC National Contact Manual (National Focal Points contact list) is available from [THIS LINK](https://oceanexpert.org/document/17716).

The data presented on ranking of top CD needs were based on general average. However, due to the relatively small sample sizes care must therefore be taken when interpreting the results and making assumptions based on the data presented.

 **3. Top critical CD needs:**

 Based on the inputs from IOC focal points, the top 3 CD needs included *funding and investment, strengthened international partnerships and regional networks for collaboration,* and *research vessels and inshore boats.*

In terms of developing capacity in human resources, the top priorities were *higher education degree (BSc-PhD) programmes in ocean science, advanced professional development training courses, management training for senior researchers and heads of institutions*, and *access to on-board, research vessel-based training*.

 In terms of increased access to physical infrastructure, the top priorities were *establishment and maintenance of a register of regional scientific research infrastructure (facilities, instruments, vessels), observation facilities and equipments (remote sensing equipment, buoys, tide gauges, shipboard and other means of ocean observation)* and *technical training for ocean science related to ocean observation.*

 In terms of strengthened coordination with global, regional or sub-regional IOC communities and local networks, the priorities were *establishing an effective coordination and communication mechanism between the regional sub- commissions and the global programmes,* and *reinforced budgeting of regional sub- commissions.*

 In terms of development of ocean research policies in support of sustainable development, the top priorities were *assistance with the development of national marine science management procedures and national policies* and *sharing information on existing ocean research priorities among government and other organizations*.

 In terms of increasing visibility and awareness of ocean research, the top priorities were *support for communicating ocean science research to policy makers* and *technical training for ocean science communication.*

 In terms of mobilizing sustained (long-term) resources, the top priority that didn’t receive low ranking was *assistance in fostering partnerships to increase in-kind support opportunities.*

 **Regarding Ocean Decade:**

 In the context of the Ocean Decade Challenges, the top challenges with greatest CD needs were CHALLENGE 1*: Understand and map land and sea-based sources of pollutants and contaminants and their potential impacts on human health and ocean ecosystems and develop solutions to remove or mitigate them*, CHALLENGE 6: *Enhance multi-hazard early warning services for all geophysical, ecological, biological, weather, climate and anthropogenic related ocean and coastal hazards, and mainstream community preparedness and resilience*, and CHALLENGE 2: *Understand the effects of multiple stressors on ocean ecosystems, and develop solutions to monitor, protect, manage and restore ecosystems and their biodiversity under changing environmental, social and climate conditions*.

 As for the Ocean Decade objectives, the top objective considered highly relevant was *Objective 3*: *Increase the use of ocean knowledge and understanding, and develop capacity to contribute to sustainable development solutions*  which was ranked consistently as greatest capacity development needs across regions and groups.

 **Regarding SDG14:**

 More than half (53%) of the focal points responded that the capacity most lacking to achieve SDG 14 in their country relates to the ‘capacity to translate science to policy’.

 **Regarding national CD Strategy and needs assessment:**

About half (50%) of the focal points respondents indicated the absence of a national ocean science capacity development strategy. Almost half (43%) of the focal points respondents answered that there has not been any capacity needs assessment conducted in their country.

 **4. Outcomes**

Ms Diwa recalled the recommendations made by the Group for regional subsidiary bodies and IOC programmes to consider the survey outcomes when drafting their CD work plans and activities. A mapping exercise was initiated by the IOC CD Secretariat, incorporating the CD needs identified through the responses received in the past two surveys. This was supplemented by regional webinar series consultation targeting specific key stakeholder groups in identifying needs and opportunities in their respective organizations, etc. So far this has been done with IOCARIBE (to be reported fully under 4.2.1) and is intended to be conducted in other regions as well.

 **5. Recommendations for the 4TH CD needs assessment survey (2024-2025)**

Informed by the lessons learned from three past CD needs assessment survey, Ms Diwa presented several recommendations for the 2024 CD Needs Assessment survey:

 - design the structure and methodology of the survey in close collaboration with global and regional programmes to capture specific CD needs in the regions;

 - conduct the CD survey through the regional secretariats, especially in identifying and reaching out to key stakeholder groups as targeted respondents in their respective regions;

 - collaborate with other survey requirements of other programmes, e.g. GEBCO, CD Facility, Ocean Policies, GOSR, etc.

**DISCUSSION**

**PROPOSED ACTION:**

**The Group recommended that the 2024 CD needs assessment** survey be jointly organized and implemented in close coordination with the RSB Secretariats to reach stakeholder groups as targeted respondents in their respective regions.

1100 – 1115 COFFEE BREAK

1115 - 1230

# **3. 32ND SESSION OF THE IOC ASSEMBLY (2023) OUTCOMES AND INSTRUCTIONS**

This agenda item was introduced by Mr Alan Evans.

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

Mr Evans recalled that the Assembly, at its 31st session, through Decision A-31/3.5.3, had instructed the Group to submit the final draft of the IOC Capacity Development Strategy for 2023–2030, together with a proposed outreach and communication plan to the 32nd session of the Assembly last June 2023. He referred to three documents submitted to th 32nd Assembly, as [Document IOC/A-32/4.3.Doc(1)](https://oceanexpert.org/document/32541) ‘IOC Capacity Development Strategy for 2023–2030’ for the main body of the Strategy, [IOC-32/4.3.Doc(1) Addendum](https://oceanexpert.org/document/32555) for extensive background information related to the process of reviewing and revising the strategy towards the IOC Capacity Development Strategy for 2023–2030, and [IOC-32/4.3.Doc(2) .](https://oceanexpert.org/document/32558) on Outreach and Communications Plan to Promote its Visibility and Reach.

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 resulting IOC Capacity Development Strategy for 2023–2030 framework maintained the original six outputs, with 16 activities detailed in 31 actions. Mr Evans 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.

Mr Evans 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.

Mr Evan shared that the Assembly recognized the central role of Capacity Development as a core function of the IOC and expressed full support in the IOC Capacity Development Strategy for 2023–2030. They welcomed the incorporation of important priorities such as data sharing, gender equality, SIDS, indigenous communities, ocean literacy and early career professionals in the strategy. They also encouraged the strengthening and synergizing of efforts through close collaboration and partnership with other existing initiatives to avoid duplication and mutualize resources. The Assembly called for adequate and sustainable regular programme funding for capacity development and its coordination to ensure robust and sustainable delivery of capacity development and help position the IOC strategically within the broader UN Oceans family.

**DISCUSSION**

**PROPOSED ACTION:**

**The Group called on** IOCglobal programmes and regional subsidiary bodies (and secretariats) to deliver capacity development with more systematic approaches to ensure consistency between global, regional and national capacity development. The Group recommended to map the CD workplans of the global and regional programmes vis-à-vis the IOC CD Strategy outputs to demonstrate in which outputs their CD activities contribute to.

## **3.2 PUBLICATION AND OUTREACH**

This agenda item was introduced by Ms Johanna Diwa.

She referred to Document IOC/A-32/4.3.Doc (2) ‘Outreach and Communications Plan to Promote the Visibility and Reach of the IOC Capacity Development Strategy’ which lays out the recommendations from the Outreach Working Group on concrete plans to highlight the core messages of the IOC Capacity Development Strategy for 2023–2030, and proposed ways for the strategy to reach its target audience. Other than promotional materials and activities, the plan contains strategies for communications in two stages following the launch of the IOC Capacity Development Strategy for 2023-2030, utilizing existing platforms and resources of the IOC.

She reported that the IOC Capacity Development Strategy 2023-2030 document has been published in the IOC CD website and a new strategy booklet will be published soon. The strategy texts were supplemented with actual photos of CD activities that were solicited from various programmes. She expressed appreciation on behalf of the CD Secretariat to colleagues who contributed photos of their CD activities. Brief brochures will also be developed targeting specific stakeholder groups in the regions.

Through regional webinar series, starting with IOCARIBE, the GE-CD Chair and CD Secretariat had been giving webinar briefing to various stakeholder groups about the new strategic framework and the Ocean CD-Hub. Other regions were encouraged to conduct similar webinar series in collaboration with the CD Secretariat to promote the Strategy and Ocean CD-Hub in determining CD workplans in their respective regions.

**DISCUSSION**

**PROPOSED:**

**The Group called on the regional subsidiary bodies and IOC programmes** to promote the IOC Capacity Development Strategy 2023-2030.

## **3.3 REVISION OF THE GE-CD TORs**

This agenda item was introduced Mr Alan Evans.

He recalled that 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.

The Group agreed that the work of the new GE-CD could not be started until the Assembly has adopted the IOC CD Strategy 2023-2030 at its 32nd session, thus the GE-CD will submit the revised terms of reference and will seek its adoption by the 57th Session of the Executive Council instead. In theory, this revision and adoption of the new TOR and the start of the GE-CD workplan should have taken place between the interim period of September/October 2023 and September 2024.

As agreed upon during the Fourth Session of the GE-CD, this 5th session of the GE-CD will be able to refine the Terms of Reference according to the requirements of the new IOC Capacity Development Strategy 2023-2030, and the results of close consultation with the Regional Subsidiary Bodies for the regional CD workplans. The draft revised ToR below is submitted for discussion and finalization of the Group in time for submission to the 57th Session of the Executive Council in June 2024.

**(Draft) Terms of Reference
Group of Experts on Capacity Development**

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 CD initiatives,

Decides to revise the Terms of Reference of the IOC Group of Experts on Capacity Development as follows:

1. assist global and regional programmes with the implementation of capacity development needs assessments in a consistent manner;
2. 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 33rd Assembly of the UNESCO IOC 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 design and conduct the biennial CD survey in close collaboration with the regional secretariats, 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.

**DISCUSSION**

**PROPOSED:**

**The Group was requested to provide comments and feedback** on the proposed Terms of Reference. The Group reviewed and approved the new ToR as one of the working documents under the CD related agenda to be submitted to the 57th Session of the Executive Council in June 2024.

1230 – 1400 LUNCH BREAK

1400 - 1600

# **4. IOC CD STRATEGY IMPLEMENTATION**

This agenda item was introduced by Mr Alan Evans. He referred to the [IOC Decision A-32/4.3](https://oceanexpert.org/document/32845) and the actions the IOC Primary Subsidiary Bodies (global programmes and Regional Subsidiary Bodies) should take by the 33rd Session of the IOC Assembly: (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. He then invited the global programmes and regional secretariats to report on the capacity development activities and workplan vis-à-vis the outputs of the CD strategy, while considering the actions they should take in preparation for the 33rd Session of the IOC Assembly in June 2025.

## **4.1 GLOBAL PROGRAMMES**

4.1.1 IODE: OTGA

This agenda item was introduced by Ms Ana Carolina Mazzuco, Ocean Teacher Global Academy Coordinator.

She reported that, over the past years, the OceanTeacher Global Academy (OTGA) and its network of 17 Regional and Specialized Training Centres (RTC/STCs) and other partners has successfully supported the implementation of the IOC Capacity Development Strategy by building equitable capacity and delivering high-quality training addressing the priority areas of all IOC Programmes, the UN Decade of Ocean Science for Sustainable Development, and the 2030 Agenda and its SDGs. OTGA supports various formats of training (face-to-face, online, and blended), in four languages (English, Spanish, French, and Portuguese), which are co-designed and delivered with the contribution of ocean experts within and across the regions.These courses cover a wide range of topics in ocean science, observations, and services, such as data management and sharing, marine spatial planning, satellite remote sensing, blue carbon, ocean literacy, weather forecast, and many more. OTGA secretariat provides coordinated management, a common global e-learning platform as well as guidance to the creation of new educational resources meeting global and regional CD needs. OTGA has continuously updated and implemented quality procedures and maintain ISO certification as a learning services provider to ensure the highest quality of training is delivered (reference Document No. OTGA01, Course Management Guidelines). Training and management is provided free of charge for both organizers and users, enabling accessibility also for under-resourced participants and institutions. OceanTeacher Global Academy has been designated as an IODE programme component, which recognized the importance of its activities and secured RP funding.

Currently, OTGA e-learning platform hosts approximately 380 sets of training material and more than 11200 users, including course participants, facilitators, and trainers. A brief summary of OTGA performance in recent years:

The OTGA-2/FUST project implementation started in the midst of the COVID-19 pandemic, while most countries were under a strict lockdown. Nevertheless, the OTGA Project implementation proceeded even though with some delay given the necessary adaptations. Despite the limitations brought by the pandemic, in 2020, OTGA was able to: call and select new hosting training centres; organize 8 courses (online); redesign and upgrade the e-learning Platform; and review database.

With the re-start of activities in 2021 post-pandemic, OTGA significantly increased its contributions to capacity development with: 32 training courses organized (online); development of new tools in the e-learning platform; production of 2 outreach videos; assessment of quality procedures for ISO; and creation of new courses following standards and guidelines.

In 2022, 29 training courses were delivered by OTGA (online and blended) with a major upgrade of the OceanTeacher e-Learning Platform to provide a single sign-on for participants (resulting from the integration of the OceanExpert Directory of Marine and Freshwater Professionals (OE) with OTGA e-learning platform), provide reporting templates, and implementation of a communication component that allows OTGA alumni to communicate using data stored in OE and OTGA. Creation of an online course for RTC/STC administrators on *Introduction to designing and teaching online courses* and a tutorial on *OTGA Copyright Rules Tutorial*. Implemented *OTGA Course Design Rubric* and *Course Alignment Checklist* to evaluate and improve instructor-led and self-paced OTGA courses

In 2023, OTGA completed a successful year with more than 2,300 learners enrolled in OTGA courses. OTGA delivered 49 courses during this period with 90% of courses being provided online including 13 self-paced courses where learners can progress through the course material at their own speed and on their own schedule. OTGA e-learning platform supports the capacity development activities of other IOC programmes as well as hosting training courses for organizations including VLIZ, BODC/MEDIN, EMODnet, the ECOP programme, and POGO/AWI Centre of Excellence.

It was highlighted that OTGA has already received more than 65 requests for training courses in 2024, reflecting its value to the ocean community and IOC capacity development. OTGA foresees a significant increase in staff demand in the next years, which will require planning, collaboration, and extra-budgetary funds to sustain high-quality operations and incorporate new developments. OTGA Steering group will meet between 11-13 June 2024 to review the achievements of the network in the last years and plan for the future. This meeting agenda includes (1) an assessment of the results of the OTGA-2/FUST project, (2) expectations and agreements within the RTC/STC network, (3) preparation of work plans and budgets for 2025, (4) mapping of funding strategies, and (5) codesign of new training activities. OTGA committed in its workplan to implement action to raise additional resources and secure the financial sustainability of the programme component activities. Full details of the OTGA revised work plan and budget for 2024 can be found in the document IOC/IODE-MG-2024/11.4**.**

OTGA is working closely with IOC CD secretariat to ensure that the trainings delivered address global and regional needs, and requests from IOC Member States and IOC Regional Sub-Commissions.

4.1.2 Global Ocean Observing System

This agenda item was introduced by Ms Emily Smith, representative of Global Ocean Obserivng System (GOOS).

4.1.3 Ocean Science/GOSR

This agenda item was introduced by Ms Katherina Schoo, representative of the Ocean Science programme.

4.1.4 Tsunami

This agenda item was NOT PRESENTED as there was no representative from the Tsunami unit.

4.1.5 Marine Policy/MSP

This agenda item was introduced by Ms. Michele Quesada da Silva, MSPglobal Project Coordinator.

She referred to the key components of the IOC CD Strategy related to the Marine Spatial Planning (MSP) work of the Marine Policy and Regional Coordination Section (MPR): 1.2.1 Promote and assist with the organisation of **training courses**, workshops; 1.2.5 Promote the development and sharing of **training materials and tools;** 2.2.1 Promote the development and wide use of regional and global **data and information systems;** and 3.3.1 Organise and conduct biennial **capacity development needs survey**. The IOC activities on MSP are implemented by the MSPglobal project, which is co-funded by the European Union as part of the Joint MSProadmap of IOC-UNESCO and European Commission. Capacity development & Awareness is one of the pillars of this joint framework, thus the work of MSPglobal includes the following: (i) development of an **online training at OTGA** in English, French and Spanish; (ii) implementation of national and regional **in-person trainings using the MSP Challenge board game**; (iii) establishment of a **training network** on MSP through the preparation and donation of the MSP Challenge training material in the six UN languages plus Portuguese; (iv) development of **new knowledge and tools for MSP**, such as How-to databoxes; (v) **assessment of global capacity needs on MSP**. MSPglobal started in 2018 and is currently in its 2nd phase. In case the project is renewed in 2025 for a 3rd phase, the idea is to develop further tools and more specific trainings about themes to be defined according to the assessment of capacity needs on MSP as well as a future IOC-wide Strategy on Sustainable Ocean Planning and Management (SOPM) and Decade Programme on Sustainable Ocean Planning (SOP) under development.

4.1.6 UN Ocean Decade (See Agenda Item 5)

**DISCUSSION**

**PROPOSED:**

**The Group was requested to comment on the CD activities presented by the global IOC programmes. The Group recommended** the mapping of CD workplans vis-à-vis the IOC CD Strategy in time for the 33rd Session of the IOC General Assembly in June 2025.

## **4.2 REGIONAL PROGRAMMES**

4.2.1 IOCARIBE

Ms Lorna Innis, Head of Regional Secretariat, delivered a presentation for IOCARIBE and its capacity development activities and priorities including its proposed actions.

**PROPOSED:**

**The Group was requested to comment on the IOCARIBE CD workplan and its contribution to the implementation of the IOC Capacity Development Strategy in the region.**

**DAY 2 - Wednesday 28 February**

1000-1100

## **4.2 REGIONAL PROGRAMMES (Continued)**

Mr Alan Evans opened Day 2 of the Meeting, and quickly summarizing the agenda items discussed on the first day. He explained that due to time zones in IOCARIBE region, the presentation of Ms Innis has already been discussed as last item on Day 1. He then called IOCAFRICA to make the presentation.

4.2.2 IOCAFRICA

Mr John Ndarathi from the Regional Secretariat delivered a presentation for IOCAFRICA and its capacity development activities and priorities including its proposed actions.

4.2.3 IOC WESTPAC

Mr Somkiat Khokiattiwong, delivered a presentation for IOC WESTPAC on behalf of the Regional Secretariat.

The IOC Sub-Commission for the Western Pacific (WESTPAC) endeavors to accelerate transformations in capacity development through the integration of training and research, enhancement of endogenous capacity and ownership of Member States, and the well-established mutual assistance and cooperation in the region.

The Sub-Commission contributed to the development of, and continues to implement the IOC Capacity Development Strategy in the region. To build capacity and further ensure the capacity could be applied into practices and sustained over time, the Sub-Commission considered that capacity development shouldn’t stand alone, thus have integrated it into the development and implementation of nearly all WESTPAC programmes and projects, co-designed and co-implemented with Member States in the region in the four key areas of actions: ocean processes and climate change; marine biodiversity, seafood safety and security; ocean ecosystem and public health; and emerging ocean issues.

The Sub-Commission’s capacity development was implemented as follows in sum :

1. IOC [Regional Network of Training and Research Centers (RTRCs)](https://ioc-westpac.org/rtrc/) on Marine Sciences:

Following the IOC Principles and Strategy for Capacity Building (IOC/INF-1211, adopted at the 23rd Session of IOC Assembly, 21–30 June 2005), the Sub-Commission developed this initiative of RTRCs in 2008, aiming to improve and sustain national and regional research capacity of IOC Member States in the region which is vital to sustainable development. Through the establishment of Regional Training and Research Centers (RTRCs) in national oceanographic institutes or universities, regular training and research opportunities were provided by RTRCs on their specialized areas to young scientists, especially those who come from developing countries in the region. So far, more than 1,500 early career ocean researchers from more than 60 countries have joined the RTRCs’ training and research activities.

The RTRCs initiative gained wide recognition and support from Member States in the region. Until now, a total of six [RTRCs](https://ioc-westpac.org/decade-actions/rtrc/) have been established, with specialized areas covering ocean dynamics and climate, marine Biodiversity and Ecosystem Health, marine toxins and seafood safety, reef management and restoration, marine plastic debris and microplastics, and coastal contaminant monitoring and marine innovation technology, which is the most recently was established at the WESTPAC’s 14th Intergovernmental Session, 4-7 April 2023, hosted by the State Key Laboratory of Marine Pollution (SKLMP), the City University of Hong Kong.

This region-specific initiative has been endorsed as the UN Decade Action 23: “[Accelerating capacity development transformations in the Western Pacific - Regional Network of Training and Research Centers (RTRCs) on Marine Science](https://oceandecade.org/actions/accelerating-capacity-development-transformations-in-the-western-pacific-regional-network-of-training-and-research-centers-rtrcs-on-marine-science/)”.

1. Tailored national and international training: WESTPAC considers that capacity building could be only more effective and sustained over the long term if people are best empowered to realize their full potential with a combination of capacity building tools that are sustainable – home-grown, long-term, and generated and managed collectively by those who stand to benefit. Following this concept, a series of regional and national trainings and workshops that were tailored to fit the needs of Member States are conducted in the region, for example, ocean remote sensing for habitats mapping, coral restoration and conservation, marine plastic debris and microplastics monitoring, marine spatial planning training for trainers, environmental DNA for marine biodiversity monitoring and research, marine toxin analysis, jellyfish and awareness of communities, etc., including in implementation of [four WESTPAC-led UN Ocean Decade Actions](https://ioc-westpac.org/decade-actions/).
2. International marine science conference: The WESTPAC International Marine Science Conference is a tri-annual recurring conference launched in 1989, it contributes to regional capacity building by providing a platform to present the current status of ocean knowledge, take stock of relevant achievements, identify future priorities, and continuously catalyze partnerships and concrete actions for transformative ocean-based solutions to sustainability challenges in this particular region.

The upcoming WESTPAC Conference, namely the [11th WESTPAC International Marine Science Conference](https://www.iocwestpac2024.com/), will be organized in conjunction with the 2nd Ocean Decade Regional Conference on 22-25 April 2024 in Bangkok, Thailand. The Conferences comprise (i) 25 Scientific Sessions and 1 Special Forum, (ii) 13 Ocean Decade Workshops for global and regional Ocean Decade Actions to bring together action partners, review their development progress, catalyze new partnerships, and deliberate on action plans, and (iii) 12 Ocean Decade Incubators, which serve as an interactive forum to catalyze partnerships, strengthen dialogue from ocean knowledge generators to knowledge users, initiate co-designing processes, and facilitate the development of potential Decade programmes or projects.

1. ECOPs’ empowerment: Encouraging and supporting the Early Career Ocean Professionals (ECOP) is a key element in the WESTPAC’s programs, projects and WESTPAC-led Ocean Decade Actions. WESTPAC has been continuously providing travel grants to the ECOPs to facilitate their participation and engagement in capacity building activities and attending conferences, which significantly empowered the young professionals with meaningful networking and professional development opportunities and incubate and nurture young ocean scientists to benefit this region in the long run.

Specifically, WESTPAC grants travel funds to more than 40 participants to support their participation in the 2nd UN Ocean Decade Regional Conference & 11th WESTPAC International Marine Science Conference, 22-25 April 2024, Bangkok, Thailand.

Moreover, WESTPAC has initiated the Best Young Scientist Awards since the 8th IOC/WESTPAC International Scientific Symposium in 2011. This initiative aims to nurture science leaders and assist young scientists in further dedicating themselves to the sustainable development of ocean and coastal areas to benefit all. In alignment with previous practice, four young professional scientists will be selected at the coming 2nd UN Ocean Decade Regional Conference & 11th WESTPAC International Marine Science Conference, 22-25 April 2024, Bangkok, Thailand.

4.2.4 IOCINDIO

Mr Justin Anahanzo, from the Regional Secretariat, delivered a presentation for IOCINDIO and its capacity development activities and priorities including its proposed actions.

1100 – 1115 COFFEE BREAK

1115 – 1230

 Discussion/Q&A continued for Session 4.2

**DISCUSSION**

**PROPOSED ACTION:**

**The Group urged the global and regional programmes to consider** mapping their CD activities vis-à-vis the needs identified and the outputs of the IOC CD Strategy 2023-2030 to show to which outputs of the CD Strategy their CD workplans contribute to. **The Group recommended that the global programmes and regional secretariats prepare their draft CD workplans** for discussion in the next GE-CD session in time for the 33rd Session of the IOC General Assembly in June 2025.

## **4.3 OTHER PROPOSALS**

This agenda item was introduced by Ms Johanna Diwa

4.3.1 OCEANTRAINING INTERNSHIP

One of the CD needs that were identified in the CD needs assessment survey and other consultations with the regions pertain to internship opportunities to enhance global human capacity in the operationalization of information systems and delivery of specialized training. A call for proposals was issued by the Norwegian Agency for Development Cooperation (NORAD) at the end of 2023 and a proposal on OceanTraining Internship was submitted and subsequently approved for implementation in 2024.

The OceanTraining Internships aim to promote national and international exchange of professionals to acquire expertise related to the IOC mandate (research, services, and capacity-building). Through a learning-by-doing approach, the participants will have the opportunity to learn from experts in the field and contribute to the development of new resources fit for the global or regional community. The internships will be complementary to the ongoing capacity development activities conducted by the IOC/UNESCO, 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 will be 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 proposal supports the recently approved IOC Capacity Development Strategy 2023-2030, where is foreseen Establish, or collaborate with other organisations to develop internship/fellowship and on-board training programmes as a recommended action to promote Continuous professional development (Activity 1.2) and Sharing of knowledge and expertise including through community building (Activity 1.3) in Output 1 (Human resources developed at individual and institutional levels). The IOC CD strategy also highlights (items 27 to 30) the importance of internships for professionals to gain on-the-job training and expertise not available in their institution, and explicitly states actions (1.2.2, 1.2.3, 1.3.1 to 1.3.4) to expand and support peer-to-peer exchange and mentoring, which are the focus of this project proposal.

The initial operation of the IOC OceanTraining Internships is proposed for 12 months, to be coordinated by the IOC CD unit. The co-design and organization of administrative procedures started in February 2024. Calls for applications and expressions of interests for potential host institutions will be opened by May-June 2024 with targeted placement and actual conduct from September to November 2024, with a 3-month target duration for internship period.

4.3.2 OCEAN RESEARCH POLICIES

One of the outputs of the new IOC Capacity Development Strategy 2023-2030 is

*Output 4. Development of ocean research policies in support of sustainable development objectives promoted*

 *4.1 Fostering the development of ocean research policies*

 *4.1.1 Compile and compare information on existing ocean research policies, and disseminate to Member States for their use*

 *4.1.2 Assist and enable Member States with the development of ocean research policies, making use of the results of 4.1.1*

It is important to gather baseline information on documented ocean research policies of Member States. This can be done through an initial desk research and/or via Circular Letter inviting Member States to share information on their ocean research policies. Alternatively, a dedicated section asking for existing ocean research policies of each country can be integrated on the 2024 CD needs assessment survey.

4.3.3 General Bathymetric Chart of the Oceans (GEBCO)

One area where there was high demand on capacity development involved deep sea management. Going beyond particular observation or monitoring, capacity development is a transformative element for achieving the policies and changes needed in order to use ocean science as a major component for policy development and social development.

An IOC Circular Letter No 2981 called on nomination of experts to serve on the IOC Working Group on User Requirements and Contributions to GEBCO Products. This Working Group has been tasked in particular to:

(i) collect, integrate and assess user requirements to inform the development of present and future GEBCO products; and

(ii) address ways for strengthening the contributions of IOC programmes and Member States activities to GEBCO data and products. In accordance with its terms and reference, the Working Group is comprised of representatives of IOC Member States and one expert each from the GEBCO Guiding Committee, and relevant IOC technical and regional subsidiary bodies (GLOSS, GOOS-SC, IODE, TOWS-WG, IOCAFRICA, IOCARIBE, IOCINDIO, IPHAB, WESTPAC and GOOS Regional Alliances).

A survey to assess user needs related to GEBCO and also CD needs in relation to GEBCO products will be launched soon. In this regard, it was suggested to include an observer from the IOC CD secretariat or GE-CD in the GEBCO working group.

## **4.4 EMERGING INITIATIVES**

4.4.1 BBNJ CHM

This agenda item was introduced by Ms Lucy Scott. She introduced the **Biodiversity Data Hub for the High Seas**, a project submitted by IODE for NORAD funding.

Budget approved: $85,000

**1. Rationale and background:**

Ms Scott 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/>). This 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 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 ODIS/OIH-BBNJ 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.

1230 – 1400 LUNCH BREAK

1400 - 1600

 Discussion/Q&A continued for Session 4.3

**DISCUSSION**

**PROPOSED ACTION:**

**The Group was requested to comment** on the proposals presented above including sharing of ideas and potential funding calls in the future.

# **5. UN OCEAN DECADE**

## **5.1 DECADE CD FACILITY**

This agenda item was introduced by Ms Mary Frances Davidson, Ocean Decade CD Facility Coordinator.

## **5.2 WG9 VISION 2030**

This agenda item was introduced by Ms Edem Mahu, Co-Chair of the Decade Vision 2030 Working Group 9 on Capacity Development.

Ms Mahu recalled that the UN Ocean Decade Coordinating Unit (DCU) tasked Prof. Brian Arbic and Dr. Edem Mahu to co-chair and establish a working group (i.e Working Group 9) towards developing a strategic Ambition for Ocean Decade Challenge 9: Skills, Knowledge, and Technology for All as part of the Ocean Decade Vision 2030 Process.

Challenge 9 seeks to ensure comprehensive capacity development and equitable access to data, information, knowledge, and technology across all aspects of ocean science and for all stakeholders.

In response to this call, a working group, i.e. Working 9 was formed in addition to nine other Ocean Decade challenge Working Groups. The WG was thoughtfully constituted with support from the DCU to comprise experts from a wide diversity of backgrounds (natural sciences, social sciences, policy, technology, etc.), geographic areas, ages, and career stages.

To develop the strategic ambition for the challenges, each working group was tasked to identify the priority needs for their challenge.

To define the user needs for challenge 9, the team embarked on a clear methodology outlined below.

* *Internal discussions and consultations among the working group members.*
* *Consultation of some IOC regional taskforces and the Decade Capacity Development Facility*
* *Consultation of Past surveys, including the 2017, and 2020 Global Ocean Science Reports, the 2020, and 2022 IOC capacity assessment survey*
* *Regular meetings with co-chairs and the Decade Advisory Board*
* *Public Webinars*

These series of meetings and consultations culminated in the development of a [draft white paper](https://oceanexpert.org/document/33801) which has been sent for public review.

**DISCUSSION**

**PROPOSED ACTION:**

**The Group was requested to comment and advise** on the best way to collaborate with the Decade CD Facility and WG9 Vision 2030 in implementing the IOC Capacity Development Strategy.

**Day 3 – Thursday, 29 February**

1000 - 1100

# **6. RECONSTITUTION OF GE-CD**

## **6.1 2024 GE-CD RENEWAL PROCESS**

This agenda item was introduced by Ms Johanna Diwa.

As the current GE-CD will be completing its tenure as soon as the Executive Council approves the new ToR of the renewed GE-CD membership, a new call will be issued following the 57th Session of the Executive Council in June 2024. A Circular Letter will be prepared to invite Member States to submit the information of their nominated experts including a brief biography highlighting their experience on capacity development. Current members of the GE-CD who wish to remain in the Group still need to go through the process and secure a renomination from their respective governments. The call will be open until the end of July 2024, and the list of selected experts will be submitted for the approval of the new Executive Secretary ideally in August 2024, with the new Group starting their term by September 2024. Another meeting of the new Group will be organized in October 2024 to enable the new Group to start working on the required actions including the development of an implementation plan for submission to the 33rd IOC Assembly in June 2025.

## **6.2 GE-CD CHAIRMANSHIP**

This agenda item was introduced by Mr Peter Pissierssens.

He noted that as explained in 6.1, the current GE-CD will cease to exist as soon as the Executive Council approves the new ToR of the renewed GE-CD membership in June 2024. Since the election of the Chair will not occur until the new membership has been created, the Group is invited to consider the continuation of the term of Mr Alan Evans as GE-CD Chair for the next four months.

**DISCUSSION**

**PROPOSED ACTION:**

**The Group noted the process and timeline for the renewal process of GE-CD membership by September 2024, and thus postponing the election to the next session of the GE-CD. The Group agreed to consider the continuation of the term of Mr Alan Evans for the current GE-CD chairmanship.**

1100 – 1130 COFFEE BREAK

1130 - 1230

# **7. WORKPLAN FOR THE NEXT INTERSESSIONAL PERIOD**

# This agenda item was introduced by Mr Alan Evans. He presented the table below with tasks related to the instructions from the XXXII Session of the General Assembly. He asked the members to indicate which tasks they would be willing to contribute to.

|  |  |  |
| --- | --- | --- |
| **Activity** | **Assigned Roles/Contributors** | **Timeline** |
| ***As discussed under agenda item 2.2, the following tasks relating to the Ocean CD-Hub:*** |
| Organize and conduct regional webinar series as part of outreach and promotion of the new IOC CD Strategy 2023-2030 and the utilization of the Ocean CD-Hub | RSB Secretariats and CD Secretariat |  |
| Contribute entries to the Ocean CD-Hub by submitting details of related CD initiatives of their organizations/countries | GE-CD |  |
| ***As discussed under agenda item 2.3, the following tasks relating to the 4th CD needs assessment survey:*** |
| Draft the design and methodology and development of survey questionnaires | CD Secretariat  | March – April 2024 |
| Identification of targeted key stakeholder respondents | RSB Secretariats | March – April 2024 |
| Review and approve the survey  | GE-CD | June 2024 |
| Conduct of the survey | CD Secretariat (CL) and RSB Secretariats | June – July 2024 |
| Analysis | CD Secretariat (overall); RSB Secretariats (regional) | August – September 2024 |
| Report to the GE-CD | CD Secretariat | October 2024 |
| ***As discussed under agenda 3.1 – 3.3, the following tasks relating to instructions by the IOC-XXXII Assembly:*** |
| Revised GE-CD ToRs approved by the EC, call for GE-CD membership renewal | CD Secretariat (CL) | June 2024 |
| New GE-CD membership inaugurated, WG on Implementation Plan established | New GE-CD (WG on Implementation Plan) | September 2024 |
| Draft CD workplans presented to GE-CD | RSB SecretariatsGlobal programmes | September 2024 |
| Working Group to start on drafting implementation plan | GE-CD Working Group | October – December 2024 |
| Review and submission of implementation plan | GE-CD | February 2025 |
| (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; (to be submitted to the IOC-XXXIII Assembly) | CD Secretariat | April 2025 (Submission of documentation for the Assembly in June 2025)  |

# **8. ADOPTION OF THE REPORT AND CLOSING OF THE MEETING**

Ms Johanna Diwa 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.

Mr Alan Evans thanked the GE-CD members and all the participants for their active participation in the meeting. He also thanked the Secretariat for all the arrangements. He closed the meeting at XX:XX.

# **ANNEXES**

Annex I. Agenda

Annex II. List of Participants

## Annex I.

**Fifth Session of the IOC Group of Experts on Capacity Development**

**(GE-CD-V)**

**Paris, 27-29 February 2024**

**PROVISIONAL AGENDA**

**DAY 1, 27 February, TUESDAY**

1000-1100

 1. **OPENING OF THE MEETING**

 1.1 ADDRESS BY THE CHAIR

 1.2 ADOPTION OF THE AGENDA

 1.3 ADOPTION OF THE TIMETABLE

 2. **REPORT ON THE STATUS OF GE-CD-IV WORKPLAN**

 2.1 OCEAN INFOHUB PROJECT

 2.2 OCEAN CD-HUB PROJECT

 2.3 CAPACITY DEVELOPMENT NEEDS ASSESSMENT SURVEY

1100 – 1115 COFFEE BREAK

1115 - 1230

 3. **IOC-XXXII ASSEMBLY (2023) OUTCOMES AND INSTRUCTIONS**

 3.1 IOC CD STRATEGY 2023-2030

 3.2 PUBLICATION AND OUTREACH

 3.3 REVISION OF THE GE-CD TORs

1230 – 1400 LUNCH BREAK

1400 - 1600

4**. IOC CD STRATEGY IMPLEMENTATION**

 4.1 GLOBAL PROGRAMMES

 4.1.1 IODE: OTGA

 4.1.2 Global Ocean Observing System

 4.1.3 Ocean Science/GOSR

 4.1.4 Tsunami

 4.1.5 Marine Policy Research

 4.1.6 UN Ocean Decade (under 5)

 4.2 REGIONAL PROGRAMMES

 4.2.1 IOCARIBE

**DAY 2, 28 February, WEDNESDAY**

1000-1100

Opening and Wrap Up Day 1

 4.2 REGIONAL PROGRAMMES

 4.2.1 IOCARIBE (moved to Day 1, 1515 – 1530)

 4.2.2 IOCAFRICA

 4.2.3 IOC WESTPAC

 4.2.4 IOCINDIO

1100 – 1115 COFFEE BREAK

1115 -1230

 DISCUSSION/Q&A

 4.3 OTHER PROPOSALS

 4.3.1 OceanTraining Internships

 4.3.2 Ocean Research Policies

 4.3.3 GEBCO

 4.4 EMERGING INITIATIVES

 4.4.1 BBNJ CHM

1230 – 1400 LUNCH BREAK

1400 – 1600

 DISCUSSION/Q&A

5. **UN OCEAN DECADE**

 5.1 DECADE CD FACILITY

 5.2 WG9 VISION 2030

**DAY 3, 29 February, THURSDAY**

1000 – 1100

6. **RECONSTITUTION OF GE-CD**

 6.1 2024 GE-CD RENEWAL PROCESS

 6.2 GE-CD CHAIRMANSHIP

1100 – 1130 COFFEE BREAK

1130 – 1200

7. **WORKPLAN FOR THE NEXT INTERSESSIONAL PERIOD**

1200-1230

8. **MEETING REPORT AND CLOSING**

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