IOC Capacity Development Strategy 2023 - 2030
IOC Decision A-32/Dec.4.3

- Adopted by the 32nd Assembly of the UNESCO-IOC
- Booklet available in four languages: EN-FR-SP-RU (printed and e-copies at the IOC CD website)

Output	Activity	Output	Activity
1. Human resources developed at individual and institutional levels	1.1 Academic and higher education	4. Development of ocean research policies in support of sustainable development objectives promoted	4.1 Fostering the development of ocean research policies
	1.2 Continuous professional development		
	1.3 Sharing of knowledge and expertise including through community building	5. Visibility, awareness and understanding on the roles and values of the ocean and ocean research in relation to human wellbeing and sustainable development increased	5.1 Fostering the development of ocean related public information and communication services
	1.4 Integration of ocean science in basic education		5.2 Fostering the development of ocean literacy
	1.5 Improving gender, generational and geographic diversity	6. Sustained resource mobilization reinforced	6.1 Enhancing sustained support (in-kind and financial) to the IOC for its international coordination role
2. Access to technology, physical infrastructure, data and information established or improved	2.1 Facilitating access to technology and infrastructure		6.2 Promoting sustained bilateral and multilateral support among Member States
	2.2 Facilitating equitable access to and sharing of ocean data and information		
3. Global, regional and sub-regional mechanisms strengthened	3.1 Further strengthening and supporting secretariats of regional commissions		
	3.2 Enhancing effective communication between regional sub-commission secretariats and global programmes as well as other communities of practice (incl. other organisations)		
	3.3 Identifying specific national and regional capacity development needs through regular needs assessment		
	3.4 Encouraging regional and sub-regional organisations to be leaders in, and amplifiers of capacity development		

6   Outputs
16 Activities
31 Actions

GE-CD-VI Session (22-24 October 2024; Oostende, Belgium)

GE-CD Co-Chairs:
Suzan El-Gharabawy & Lina Eyouni

- **Task Team on Needs Assessment**
  <u>Co-Chairs:</u> *Laura Correa & David O'Sullivan*
  <u>Members</u>: *Elva Escobar, Ana Carolina Mazzuco, Fatma Jebri, Ahmad Al Karim, Ibukun Adewumi, Zhao Chang, Natalia Stepanova, Lina Eyouni, Nimit Kumar*

- **Working Group on Implementation Plan**
  <u>Co-Chairs:</u> *Rebecca Lahl & Carlos Torres*
  <u>Members:</u> *Masahiko Fujii, Viktor Komorin, Massata Ndao, Hai Doan-Nhu, Yesim Aslanoglu, Suzan El-Gharabawy, Madona Madona, Ann-Katrien Lescrauwaet, Ana Suarez, Zacharie Sohou, Carlos Martin Barrientos, Francis Augustine Pavanathara*

Task Team on Needs Assessment

Laura Correa (Co-Chair), David O'Sullivan (Co-Chair), Elva Escobar, Ana Carolina Mazzuco, Fatma Jebri, Ahmad Al Karim, Ibukun Adewumi, Zhao Chang, Natalia Stepanova, Lina Eyouni.

1 October 22–24, 2024

Established at the IOC Group of Experts on Capacity Development Sixth Session
Oostende, Belgium

2 October 31, 2024

First Meeting TT
Introduction of new members, discussion on the development of the Needs Assessment questionnaire and suggested timeline.

3 November 6, 2024

Review previous survey and Strategy for IOC-CD 2023-2030 10 Challenges - Ocean Decade.
JanuaryDeadline for TT to deliver a survey to the IOC secretariat is established.

4 November 14, 2024

- Integrate 10 Challenges into existing survey Questions and reorder accordingly. Map 'new' questions to 6 CD outputs – Fatma, Laura and Elva
- Rank open questions /priorities / eliminate bias – Ibukun / Lina
- Map existing IOC activities (eg OTGA) – Ana / Ahmed
- Prepare Cover Letter - Explain clearly what the expectations are and why this questionnaire will be helpful for RSBs – David

5 November 22, 2024

Presentation of draft survey design highlighting questions and progress. Documents shared to the wider group.

6 November 28, 2024

Wider CD GE meeting for Overview of CD Implementation Plan progress and integration of Needs Assessment. Review Joint progress of subgroups and agreed Next Steps.

7 December 16–20, 2024

Feedback on immediate priorities sought and agreed approach to revised RSB questionnaire.
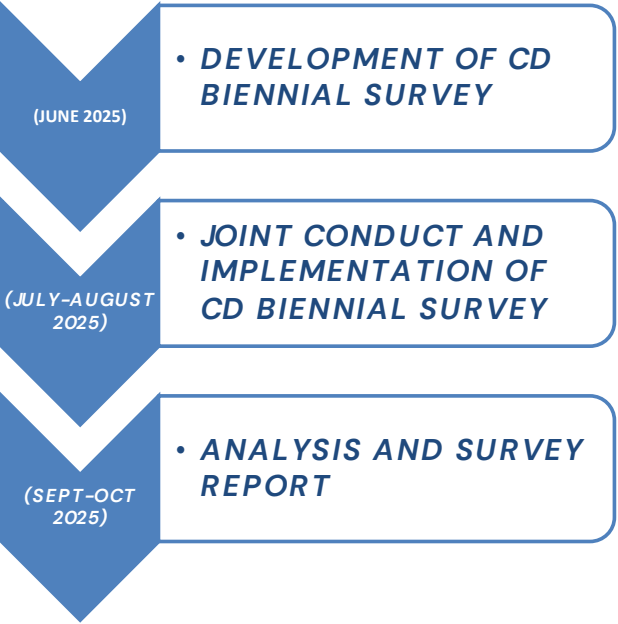
8 January 2–12, 2025

Review of draft RSBs questionnaire Needs Assessment

9 January 13, 2025

Capacity Development Needs Assessment Questionnaire issued to RSBs. Deadline 21st February.

Outcomes summarized in the Implementation Plan

(JUNE 2025)
- *DEVELOPMENT OF CD BIENNIAL SURVEY*

(JULY–AUGUST 2025)
- *JOINT CONDUCT AND IMPLEMENTATION OF CD BIENNIAL SURVEY*

(SEPT–OCT 2025)
- *ANALYSIS AND SURVEY REPORT*

Implementation Framework: Overarching Recommendations

1)**Leverage Existing Programs** – Build on IOC's established global and regional capacity development programs and efforts and strengthen existing initiatives through cross cutting CD approaches and tools (Ocean CD-Hub, OTGA, CDF, etc.)

2)**Improve implementation capacity** – Adapt a cohesive approach, strengthen MS engagement via national CD focal points in the implementation process through regional and global working groups

3)**Strengthen Regional Implementation** – Enhance the capacity of IOC RSBs, through increased staffing, sustainable funding, technology transfer and improved coordination with global programs.

4)**Global Coordination** – Support the IOC CD Secretariat as a central coordinating body for CD implementation and alignment with ongoing and new IOC-wide initiatives including the Ocean Decade, IOC data architecture, SOPM, BBNJ, etc

5)**Global Forum on Ocean Capacity Development** – provide a critical platform for a global discussion on IOC Capacity Development actions, expanding collaboration opportunities among relevant stakeholders, beneficiaries and potential partners.

6)**Strategic Partnerships** – Explore, establish, consolidate and promote strategic partnerships with key UN agencies, NGOs, regional and global networks including regional nodes (e.g., OBIS regional nodes, OTGA RTC and STC, NODCs) and shared research infrastructures and field stations as hubs for internships/mentoring programmes and field practices.

7)**Strengthen Equity, Inclusion and Decolonialisation** - The implementation of the CD Strategy and its initiatives must be grounded in principles of equity: It must support geographical representation, inclusive dialogue, and critical reflection

8)**ECOPs as Change-Makers -** key drivers of innovation and change. Mentorship, hands-on field experience, and practical training must be prioritized alongside traditional mobility opportunities to empower their growth.

9)**Enhanced Outreach & Communication** – Promote the Implementation Plan and actions, through targeted publicity, outreach, and engagement strategies to ensure broad participation and maximum impact.

10)**Prioritization & Risk Management** – Avoid fragmentation by streamlining efforts, reducing redundant sub-groups, and ensuring strategic alignment of capacity development initiatives. Prioritize key activities for maximum impact.

11)**Monitor, Evaluate and Adapt** –a structured approach to track progress, measure impact, and ensure accountability within the CD Strategy and its initiatives including the IOC biennial CD Needs Assessments survey and IP evaluations

Implementation Plan

2. Timeline

Table 1: Timeline of the Implementation Plan

	Milestones	**General Timeline**
Launch Capacity Development Strategy	Official publication in four languages, finalization of CD Needs Assessment and Implementation Plan by GE-CD	Q1 2024 – Q2 2025
Launch of Implementation Plan	Official publication after IOC Assembly	Q3 2025
Promotion and Outreach	Public outreach and partnership building (see Chapter 8), Global Forum on Capacity Development (Q3 2027)	Q3 2025 – Q2 2026
First Phase of Implementation (timeframe consistent with IOC's biennial budget cycles)	Joint Global Forum (Q3 2027), focus on high priority actions, resource mobilization and regional implementation. Revision of Draft M&E (Chapter 9)	Q3 2025 – Q4 2027
Evaluation and Adjustments	Review and revision to inform the development of a post-2030 CD strategy (to be presented and adopted at the IOC 35 in Q2 2029)	Q1 2028 – Q2 2029
Final Phase of Implementation	Focus on Medium/low Priority Actions; Alignment with end of Ocean Decade	Q1 2028 – Q4 2030

3. Regional Priorities / Needs Assessment

Output	Activity	Actions	IOCAFRICA	IOCARIBE	IOCINDIO	WESTPAC
1. Human resources developed at individual and institutional levels	1.1 Academic and higher education	1.1.1 Promote and assist with the strengthening and establishment of consortia of higher education and research institutions at the appropriate geographical scale	- Support and Strengthen HABs network of experts: identify the origin of invasive or exotic species and pathways of invasion, the environmental conditions conducive to invasion, and their major effects on local habitats, species, and ecosystems. - Support the Strengthening of the GOOS Africa coordination office at CURAT, Abidjan, Cote d'Ivoire	National, regional higher educational and research network database	High Priority: On Marine Spatial Planning Medium Priority: On Pollution	1. Deep-Sea 2. Coastal Haz. Early Warning Systems 3. AI Applicatio Ocean researc
		1.1.2 Promote collaboration between UNESCO Chairs and IOC, and between IOC and other organizations dealing with ocean matters on human resources development	- Support the Strengthening of the GOOS Africa coordination office at CURAT, Abidjan, Cote d'Ivoire		Medium Priority: --On Marine Spatial Planning -On Pollution -On Coastal Hazard Early Warning Systems	1. Deep-Sea 2. Coastal Haz. Early Warning Systems 3. AI Applicatio Ocean researc
	1.2 Continuous professional development	1.2.1 Promote and assist with the organization of training courses, workshops and	1.Coastal Hazard Early Warning Systems o A coastal hazard modeling and forecasting certification program	1. Blue Schools SIDS network 2. A New Blue Curriculum 3. Working to increase ocean knowledge among	High Priority: - On Marine Spatial Planning Medium Priority:	1. Deep-Sea 2. Coastal Haz. Early Warning Systems

Implementation Plan

4. Action Plans for each of 31 Actions

5. Draft M&E framework for KPIs
6. Communication and Outreach Plan

Activity 1.2 Continuous professional development

Action
Action 1.2.1 *Promote and assist with the organisation of training courses, workshops and "summer schools" relevant to the IOC mandate, including training of trainers/technicians and executive career development for institutional managers/decision makers, in collaboration with other organisations*

Objective
- Enhance disciplinary, technical and managerial competencies among marine science professionals.   - Build capacity through targeted training activities/programmes that are tailored to the needs of Member States and the IOC mandate.   - Organize short-term, focused intensive training programmes (including summer schools) that focus on practical application and leadership development.   - Develop competencies and implement learning frameworks related to Blue Skills, considering novel and emerging topics relevant to upskilling of ocean professionals and enhance institutions capability.   - Enhance and leverage existing IOC projects and programs focused on capacity development

Pathway
- Identify specific technical, scientific, and management training needs by professionals via CD biennial survey and in conjunction with RSBs.   - Implement a training request mechanism, e.g. official call or request form via OTGA platform   - Design an integrated training program offered by IOC that includes courses, workshops, and summer schools aligned with identified needs.   - Develop "training of trainers" (TOT) initiatives to ensure a cascading transfer of knowledge.   - Further develop the CD-Hub as primary global marine science training portal for CD opportunities   - Further develop the OceanTeacher Global Academy (Action 1.2.5) as a central online learning platform   - Coordinate with consortia of higher education and potentially developed programs (Action 1.1.1).   - Utilize the Capacity Development Facility's matchmaking service to replicate/scale up training initiatives and advance other capacity development activities prioritized by IOC

Main Partners	Resources
All IOC programs and initiatives, RSBs, International Oceanographic Data and Information Exchange (IODE), OceanTeacher Global Academy (OTGA), CDF, CD National Focal Points (Member States), ECOPs, UN and non-UN Organizations, Universities, NGOs	Existing resources/New resources Existing and new partners

Strengthening regional capacity through the RSBs

- ➢ IOC CD: cross-cuts all other IOC functions: all functions adopt and deliver IOC CD Strategy and IP as a key output
- IOC CD: Strategy and IP supportive of RSBs and their identified priority needs through
- RSBs are key in the successful delivery and implementation of a cohesive and inclusive capacity development in the regions
- RSB should adopt and deliver IOC CD Strategy and IP as a key output
- ➢ Regions are all different and have varying CD needs and societal priorities
- ➢ Support/Improve regional needs assessments
- ➢ develop regional workplans and team capacity (Working Groups, Focal Points..), that responds to the IOC capacity development strategy and IP
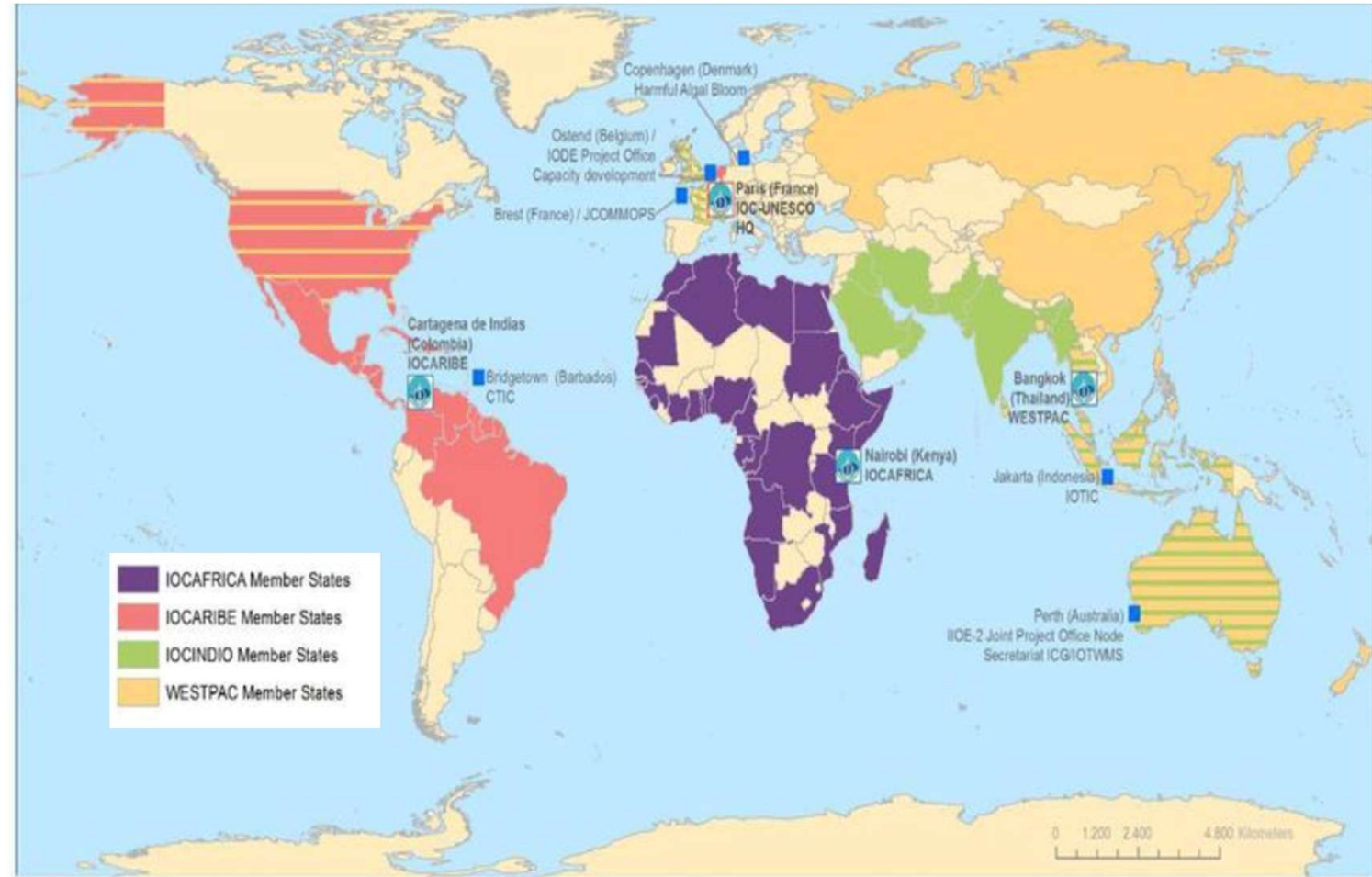
The **OceanTeacher Global Academy** is **UNESCO-IOC's** global network of Regional and Specialised Training Centres, and affiliated partners, aiming to build **equitable capacity** in ocean research, observations, and services worldwide through knowledge sharing and coordinated training.

OTGA Secretariat
UNESCO/IOC Project Office for IODE
Oostende – Belgium

IOC Capacity Development Strategy
Stratégie à moyen terme de la COI

2023–2030
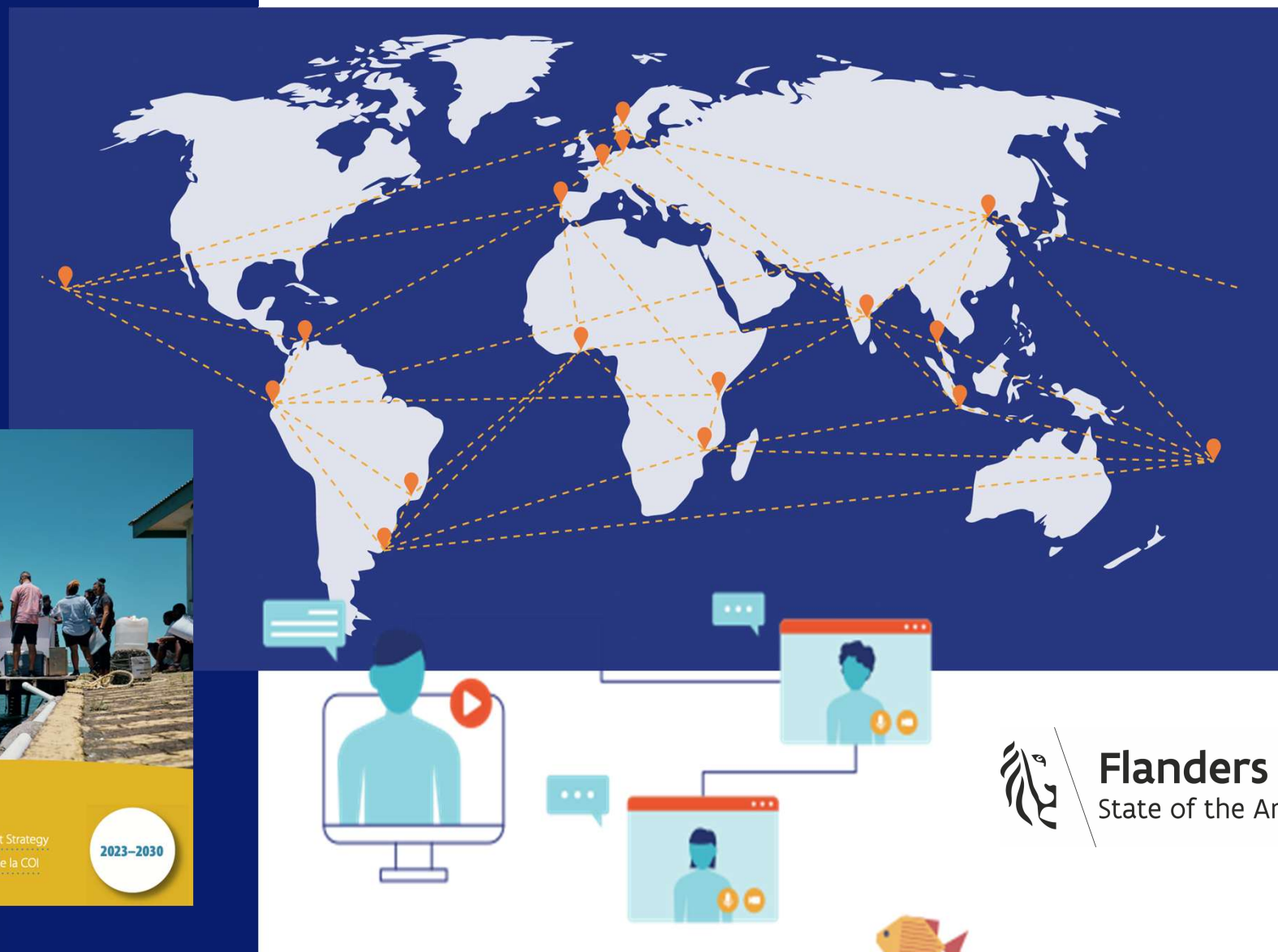
OTGA was developed to meet the training needs and priorities of **IOC Programmes and Regions**, including the **UN Decade of Ocean Science for Sustainable Development**, and **Member States**.

In the last 10 years, OTGA activities have expanded globally:

17 Training Centres (RTC/STC)

+100s of partners

+15 000 users

+50 courses yearly

4 languages EN ES PT FR

ISO-certified learning management system

Automated reporting (KPIs)

Regional and Specialized Training Centres in the Indian Ocean

International Training Centre for Operational Oceanography (ITCOOcean)

India

Indonesia Agency for Meteorology, Climatology and Geophysics (BMKG)

Indonesia

Kenya Marine and Fisheries Research Institute (KMFRI)

Kenya

Institute of Oceanography and Environment (INOS)

Malaysia

Centre for Marine Research and Technology (UEM)
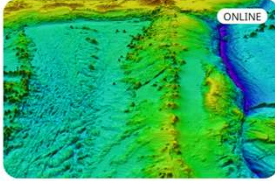
Mozambique

Portfolio of Courses

DATAPUB2023 — ONSITE
From data to data publication for scientific research
14a Scientific Knowledge And Research
Kenya
Training Center
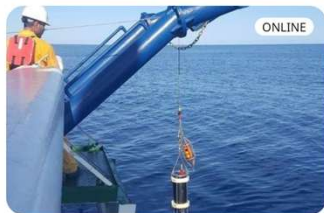
FOFM_2021 — ONLINE
Fundamentals of Ocean Floor Mapping
14a Scientific Knowledge And Research,
14c Implement Enforce International Sea Law

UPWELL2023 — ONLINE
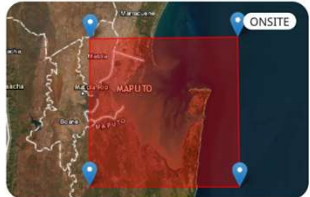Integrated Data Analysis Approach for Coastal Upwelling Studies
...e And Coastal Ecosystems,
...ific Knowledge And Researc...

OADAM2018
Digital Repositories: the Pathway from Open ... to Digital Asset ...ment
...ic Knowledge And Research
...er

QGIS2023PT — ONSITE
Uso de QGIS & PANOPLY para visualização e processamento de dados marinhos
14a Scientific Knowledg...
Mozambique
Training Center

TRDO2022PT — ONLINE
Técnicas de recolha de dados oceanográficos e acesso a dados online
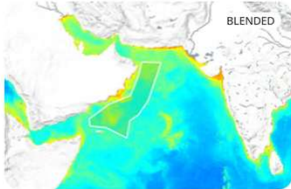...ge And Research
Portuguese

QGIS_India2024 — BLENDED
Coastal Vulnerability Mapping and Analysis using QGIS 2024
14.2 Marine And Coastal Ecosystems,
14a Scientific Knowledge And Research
India
Training Center — English

OCRS_India2024 — BLENDED
Ocean Colour Remote Sensing - Data, Processing and Analysis 2024
14a Scientific Knowledge And Research
India
Training Center — English

OFS2022 — ONLINE
The Ocean Forecast System Course: Coastal Resilience and Disaster Risk
14a Scientific Knowledge And Research
Indonesia
Training Center — English

WFSF_2023 — ONLINE
Weather Field School for Fishermen
14.2 Marine And Coastal Ecosystems,
14a Scientific Knowledge And Research
Indonesia
Training Center — English

Targeted training to emerging needs and priorities, mapped by IOC CD unit and IOCINDIO.

Create connections at the national levels, with the support of Member States, to expand the impact of training activities.

Mobilize resources to empower RTC/STCs and other training centres to enhance capacity to knowledge sharing about the ocean.

oceanteacher.org
ioc.training@unesco.org

IOCINDIO-I: KEY INSIGHTS ON REGIONAL CAPACITY DEVELOPMENT

In view of the discussions that ensued this week from the workshops, session, including the WG CD meetings:

Regional cooperation and cross-regional collaboration:

Output 1:
- Development and implementation of training courses (Data architecture, OL, BBNJ, etc.)
- Organization and conduct of joint cruises with MS

- Visiting lecturer/scholar/researcher programmes and professional exchanges (peer to peer)

Output 2:
- Data Sharing and Management (Internships, Traineeships)

Output 4:
- Joint Research (Ocean policies, SOPM)

Strategic partnerships: with key UN agencies, NGOs, regional and global networks including regional nodes (e.g., OBIS regional nodes, OTGA RTC and STC, NODCs) and shared research infrastructures and field stations as hubs for internships/mentoring programmes and field practices

Output 3:
C2Cs, OTGA RTCs/STCs, research institutions, HEIs, etc
IOC-IORA joint regional train the trainers fellowship

Output 5:
Ocean Literacy Leadership Program/OL Forum/Blue Schools/Best practices in the region

PROPOSED ACTIONS RELEVANT TO CAPACITY DEVELOPMENT

The Sub-Commission urged IOCINDIO Member States to:

- Strongly support the IOC Capacity Development Strategy 2023-2030 Implementation Plan by engaging national CD focal points in the implementation process;
- Work closely with the IOC CD Secretariat for central coordination of implementation and alignment with ongoing and new IOC-wide capacity development initiatives including the Ocean Decade, Data Architecture, SOPM, BBNJ, etc. in the region;
- Actively participate in the joint development and implementation of the next iteration of the IOC biennial CD survey in close coordination with the IOC CD Secretariat and the Group of Experts on Capacity Development (GE-CD);
- Increase support to OTGA Regional and Specialized Training Centres, including joining efforts to co-sponsor the development and improvement of training activities in the benefit of the alumni in the region.

Ongoing Call for Applications:
2025 UNESCO-IOC Ocean Traineeships

2025 HOST INSTITUTIONS

1. [Servicio de Hidrografia Naval](#)
Buenos Aires, Argentina
2. [INCOIS](#)
Hyderabad, India
3. Natural History Museum of Denmark
Copenhagen, Denmark
4. [CSIRO NCMI Information and Data Centre](#), Tasmania, Australia
5. [INVEMAR - Marine and Coastal Research Institute in Colombia](#)
Santa Marta, Colombia
6. [Decade Collaborative Center for Coastal Resilience, University of Bologna](#)
Bologna, Italy

2024 trainees from Indonesia and Tonga hosted at ITIC Hawaii

APPLY BY
15 JUNE 2025
23:59 CEST

Website: https://www.ioc-cd.org/
E-mail: ioc.training@unesco.org

unesco
Intergovernmental
Oceanographic
Commission

IOC OCEAN TRAINEESHIPS 2025

Objectives:
➢ provide opportunities for hands-on learning and upskilling through a 3-month temporary assignment at a host institution with expertise in subject areas relevant to the IOC mandate
➢ contribute to building individual capacity and institutional capacity with a lasting impact on regional capacity

Trainees must:
✓ be at the early stages of career development
✓ be citizens from IOC Member States (from the DOECD DAC List of ODA);
✓ be employed by government institutions;
✓ work on relevant activities contributing to the implementation of capacity development work plans adopted by IOC Regional Sub-Commissions

Application requirements:
✓ A completed online application form
✓ A recommendation form from a supervisor at the employing organization
✓ A choice of 1 from 6 host institutions on the list for the 2025 cohort
✓ Agreement to the terms of the traineeship programme (See Application Guidelines)

UNESCO-IOC Capacity Development at the United Nations Ocean Conference

REGISTRATION IS NOW OPEN

TWO OFFSITE SIDE EVENTS ON CAPACITY DEVELOPMENT AT THE UN OCEAN CONFERENCE

Organized by the IOC CD

REGISTER HERE

FROM STRATEGY TO ACTION:
MOBILIZING PARTNERSHIPS FOR OCEAN CAPACITY DEVELOPMENT

Image credits: Marum

DATE: 11 JUNE 2025 (WEDNESDAY)
TIME: 10:00 AM – 12:00 NN
LOCATION: RV METEOR – OUTDOOR UPPER DECK
MORNING SNACKS WILL BE PROVIDED

This side event is a Call for Global Ocean Capacity Development action, opening the opportunity for ongoing multi-stakeholder collaborative initiatives to showcase solutions and discuss integration of a joint roadmap towards the implementation of the UNESCO-IOC Capacity Development Strategy 2023-2030. It will feature presentations and a panel discussion with capacity development global experts including existing and new partners with some joint capacity development initiatives.

11 June 2025 (Wednesday)
10:00 AM – 12:00 NN
RV METEOR
OUTDOOR UPPER DECK

ADVANCING SKILLS, KNOWLEDGE, TECHNOLOGY AND PARTICIPATION FOR ALL:
AN INTERACTIVE MARKETPLACE FOR CAPACITY DEVELOPMENT TOOLS AND METHODOLOGIES

Image credits: Space Norway

DATE: 12 JUNE 2025 (THURSDAY)
TIME: 1:30 PM – 3:00 PM
LOCATION: STATSRAAD LEHMKUHL- THE FORE BANJER
VEGETARIAN LUNCH WILL BE PROVIDED

In support of Ocean Decade Challenge 9, this interactive side event will showcase key capacity development (CD) tools and methodologies made available by the IOC and its partners. Participants will have the opportunity to explore a range of approaches designed to enhance coordination and collaboration among institutions engaged in capacity development. The event will feature a diverse array of CD resources, including the Decade's matchmaking portal, the IOC OceanTeacher Global Academy, the IOC CD-Hub, IOC Regional Training and Research Centres, and more.

12 June 2025 (Thursday)
1:30 PM – 3:00 PM
STATSRAAD LEHMKUHL
THE FORE BANJER

UNOC Offsite Side-Events at the Port of Nice

THANK YOU

Johanna Diwa-Acallar
Deputy Global Coordinator for Capacity Development
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