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**6th SESSION
GROUP OF EXPERTS ON
CAPACITY DEVELOPMENT
(GE-CD-VI)**

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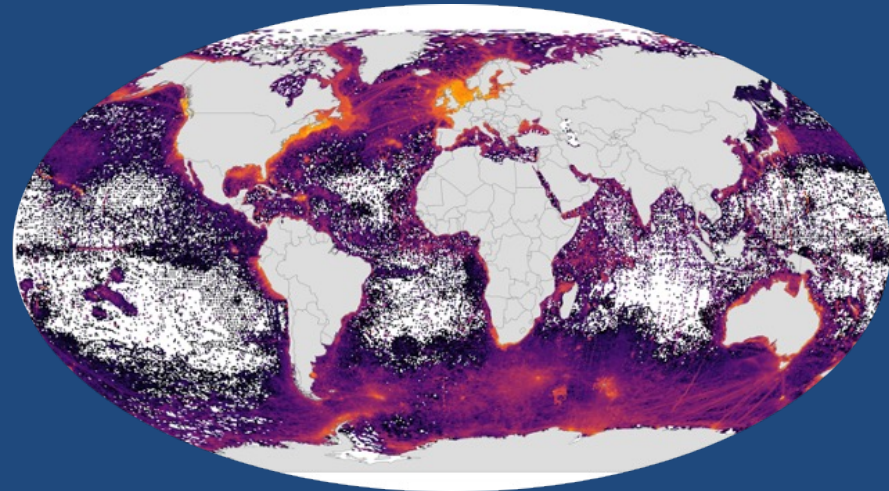
Oct 22, 2024



UNESCO-IOC OBIS Ocean Biodiversity Information System

Gateway to ocean biodiversity data you can trust

- Global network of 30+ nodes
- Supports several global & Regional Ocean Assessments
- Increase scientific capacity through data standardization

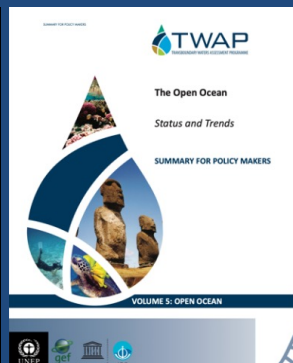
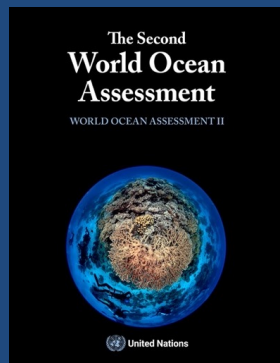


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OBIS
OCEAN BIODIVERSITY
INFORMATION SYSTEM



IOC CD Strategy Outputs and Activities

Output 1: Human resources developed at individual and institutional levels



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IOC CD Strategy Outputs and Activities



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Output 1: Human resources developed at individual and institutional levels

Training Materials

1.2.5



Comprehensive OBIS Manual

26 YouTube tutorial videos

7 Spanish translated videos



OTG@ Courses

OceanTeacher Global Academy

1.2.1

Contributing & publishing datasets to
OBIS: 47 certifications
(2023-2024)

PacMAN: Marine Invasive Species
Early Detection: 85 certifications
(2022 & 2024)

Spanish OTGA course
(Oct 2024)



IOC CD Strategy Outputs and Activities



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Output 1: Human resources developed at individual and institutional levels

Workshops

1.2.1



OBIS-SG-12 Nodes
training (Mar 2024)



Marine Biological Data
Mobilization workshop
(2024 and 2025)

OBIS-USA, IOOS, Hakai, CIOOS, MBON,
OTN, Caribbean-OBIS, and OBIS-Chile

Internships

1.2.2, 1.3.4

IOC Ocean
Training internship:

- OBIS Australia
- OBIS Deep Sea

School Curricula

1.4.1

MPA Europe:
Marine biology
curriculum for
Ostend 4th grade
class



IOC CD Strategy Outputs and Activities

Output 1: Human resources developed at individual and institutional levels

Higher Education

1.1.1

Propagules program not funded

Exploring other avenues

Training Materials

1.2.5

Develop data products platform

Reusable modular training content



In-Person Training

1.2.1

UN Ocean Decade OBON eDNA workshop (Nov 2024)

GOOS BioEco Panel (Feb 2025)

Living Data conference (Oct 2025)

Mentoring

1.3.2

Improve mentoring within network



IOC CD Strategy Outputs and Activities



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Output 2: Access to technology, physical infrastructure, data and information established or improved

Citizen Science

2.1.3

UNESCO eDNA expeditions: 200 schoolchildren, 17 countries



Equitable access

2.2.1

Spanish training content:

- OTGA Course
- Sessions in workshops



Open Data Access

2.2.1, 2.2.2

OBIS nodes contribute to global open access data system



Co-develop EOVS specification sheets with GOOS

IOC CD Strategy Outputs and Activities



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Output 2: Access to technology, physical infrastructure, data and information established or improved

Citizen Science

2.1.3

Develop stronger workflows with citizen science communities



Blueprint for ocean observing

2.2.2



Guide ocean observing programs through each step of ocean observation value chain

Equitable Access

2.2.2

Provide more translations of training content



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Output 3: Global, regional and sub-regional mechanisms strengthened

Communication

3.2.1

Node Coordination Group established

Community Engagement Officer hired to improve

- coordination and communication
- within and outside network



Regional Engagement

3.4.1

Regional nodes working together to lead CD



IOC CD Strategy Outputs and Activities



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Output 3: **Global, regional and sub-regional mechanisms strengthened**

Regional Needs & Communication

3.2.1, 3.3.1

OBIS Nodes Coordination Group:

- Identify gaps in training needs
- Enhance communication within community



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Output 6: Sustained resource mobilization reinforced

In kind

6.1.1

GOOS, BODC, TDWG,
ODIS, EurOBIS-
EMODNet, GBIF-OBIS
Joint Strategy for Marine
Biodiversity Data

OBIS Nodes



Resource Mobilization

6.2.1

5 European Union,
Horizon Europe
projects

NORAD, LifeWatch
ERIC

FUST/OTGA
(Flanders)

Cooperation Agreements

6.1.1, 6.2.1

Establish formal
agreements:
GOOS, MBON, GBIF,
ProtectedSeas



BiOES
(Biosphere
Observatories in SIDS
– not funded)



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THANK YOU

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**Appendix:
OBIS Inputs to the IOC CD Strategy Outputs and Activities
Table summaries**



IOC CD Strategy Outputs and Activities

Output	Activity	Action	Relevant Programmes/Actions Taken
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	- Propagules program to develop university curriculum – was not funded
		1.1.2 Promote collaboration between UNESCO Chairs and IOC, and between IOC and other organisations dealing with ocean matters on human resources development	
	1.2 Continuous professional development	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	- OBIS/OTGA Contributing and Publishing Datasets to OBIS (self-paced) Oct 2023 – Feb 2024, May 2024-present
			- Co-hosted annual Marine Biodiversity Data Mobilization Workshop with OBIS-USA, IOOS, Hakai, CIOOS, MBON, OTN, Caribbean-OBIS, and OBIS-Chile with dedicated sessions for Spanish speakers (April 2024, fall 2025)
			- PacMAN project established OTGA eDNA course for detecting invasive species, in person training (Fiji 2022) and self-paced course (2023-2024)
	1.2.2 Establish, or collaborate with other organisations to develop internship/fellowship and on-board training programmes	- OBIS Australia and OBIS Deep Sea will host interns selected through the IOC Ocean Training internships	
	1.2.3 Establish and collaborate with other organisations on visiting lecturer/scholar/researcher programmes and professional exchanges (peer to peer)		
	1.2.4 Promote and assist with the establishment of regional training (and research) centres relevant to the IOC mandate		
	1.2.5 Promote the development and sharing of training materials and tools	- Continuously maintained OBIS Manual for biodiversity data standards	
		- 26 YouTube training videos data formatting and controlled vocabulary with 7 translated to Spanish	
		- eDNA workshop to compare bioinformatics pipelines	
		- OBIS Data Products coordination Group will develop data products platform	
		- Develop modules training content facilitating course	

IOC CD Strategy Outputs and Activities



Output	Activity	Action	Relevant Programmes/Actions Taken
1. Human resources developed at individual and institutional levels	1.3 Sharing of knowledge and expertise including through community building	1.3.1 Establish a travel grant “fund”	
		1.3.2 Establish or collaborate with other organisations on a mentoring programme	- Plans for improving OBIS Node mentoring through OBIS Node Coordination Group
		1.3.3 Promote and assist with the development and strengthening of IOC alumni networks, and professional networks including for youth leaders	
		1.3.4 Promote funding, grant and scholarship programs to facilitate ocean research, technical development and scientific exchange through bringing visibility of opportunities via an online CD hub	- Promoted and joined IOC Ocean Training Internship
	1.4 Integration of ocean science in basic education	1.4.1 Promote the integration of ocean science in curricula of primary and secondary schools	- Horizon Europe project MPA Europe developed marine biology curriculum for local 4 th grade class in Ostend
		1.4.2 Promote careers in ocean research and ocean management	
	1.5 Improving gender, generational and geographic diversity	1.5.1 Promote participation of women in ocean research	
		1.5.2 Promote and support “young scientist” and “women in science” awards	
2. Access to technology, physical infrastructure, data and information established or improved	2.1 Facilitating access to technology and infrastructure	2.1.1 Establish and maintain a register of infrastructure to facilitate access, and promote transfer of marine technology	- Leading work package on CD in Horizon Europe project BioEcoOcean that aims to guide ocean observing programs through each step of ocean observation value chain
		2.1.2 Promote the development of regional collaboration on sustainable scientific infrastructure	
		2.1.3 Promote involvement of citizen science in ocean research	- UNESCO eDNA expeditions with 200 schoolchildren in 17 countries - Develop stronger workflows with citizen science communities (OBIS UK)

IOC CD Strategy Outputs and Activities



Output	Activity	Action	Relevant Programmes/Actions Taken
2. Access to technology, physical infrastructure, data and information established or improved	2.2 Facilitating equitable access to and sharing of ocean data and information	2.2.1 Promote the development and wide use of regional and global data and information systems	<ul style="list-style-type: none"> - OBIS nodes contribute to global open access OBIS data system - Collaborated with OBIS Colombia, OBIS Caribbean, and ESP OBIS nodes to release OBIS/OTGA Spanish course (Oct 2024)
		2.2.2 Promote the sharing of ocean data and information by stakeholders	<ul style="list-style-type: none"> - OBIS nodes contribute to global open access OBIS data system - Provide translations of training materials - Collaborating with GOOS to develop data management guidelines for EOVS Specification sheets
3. Global, regional and sub-regional mechanisms strengthened	3.1 Further strengthening and supporting secretariats of regional sub-commissions	3.1.1 Improve staffing of secretariat of regional sub-commissions	
		3.1.2 Reinforce budgeting of regional sub-commissions	
	3.2 Enhancing effective communication between regional sub-commission secretariats and global programmes as well as other communities of practice (incl. other organisations)	3.2.1 Establish an effective coordination and communication mechanism between the secretariats of the regional sub-commissions and the global programmes	<ul style="list-style-type: none"> - OBIS Node Coordination Group will more effectively engage all members of community - Community Engagement Officer hired (Oct 2024) to improve internal and external communication mechanisms

IOC CD Strategy Outputs and Activities



Output	Activity	Action	Relevant Programmes/Actions Taken
3. Global, regional and sub-regional mechanisms strengthened	3.3 Identifying specific national and regional capacity development needs through regular needs assessment	3.3.1 Organise and conduct biennial capacity development needs survey	- Through OBIS Nodes Coordination Group identify specific gaps in training needs
	3.4 Encouraging regional and sub-regional organisations to be leaders in, and amplifiers of capacity development	3.4.1 Reinforce engagement of regional and sub-regional organisations in consultation process and capacity development initiatives	- Through OBIS Nodes Coordination Group - Collaboration between regional nodes (OBIS Caribbean, OBIS Colombia, ESP OBIS) already producing targeted regional CD - Collaborating with EurOBIS-EMODNet
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	
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	5.1.1 Encourage the development of public information (communication) departments in ocean research institutions	
	5.2 Fostering the development of ocean literacy	5.2.1 Assist with the strengthening and development of ocean literacy programmes at national and regional levels	
6. Sustained resource mobilization reinforced	6.1 Enhancing sustained support (in-kind and financial) to the IOC for its international coordination role	6.1.1 Foster partnerships to increase in-kind support opportunities	- EurOBIS-EMODNet, GOOS, GBIF-OBIS Joint Strategy for Marine Biodiversity Data, BODC, TDWG, ODIS - Establish formal cooperation agreements with GOOS, MBON, GBIF, ProtectedSeas
	6.2 Promoting sustained bilateral and multilateral support among Member States	6.2.1 Encourage resource mobilisation in particular from Member States, and other donors to support the outcomes of the IOC Capacity Development needs assessment	- European Union and Horizon Europe projects (BioEcoOcean, DTO-BioFlow, eDNA Aquaplan, MARCO-BOLO, MPA Europe), NORAD, LifeWatch ERIC, FUST/OTGA (Flanders; PacMAN) and BiOES (Biosphere Observatories in SIDS – not funded)