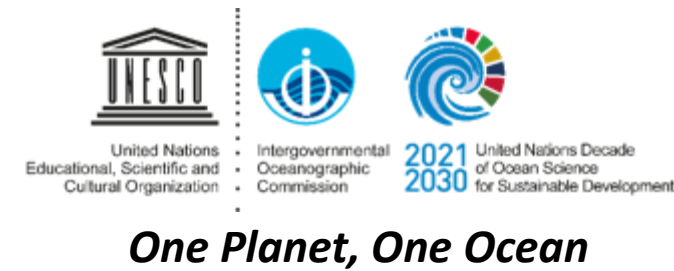


# Agenda Item 4.2

## IOC Capacity Development Strategy



Fifteenth Session of the UNESCO IOC Sub-Commission for the  
Caribbean and Adjacent Regions (IOCARIBE)  
Oranjestad, Aruba, 6 – 10 May, 2019





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# IOC Capacity Development Strategy 2015-2021

The Vision Statement of IOC's Capacity Development Strategy:

***Through international cooperation, IOC assists its Member States to collectively achieve the IOC'S high-level objectives (HLOs), with particular attention to ensuring that all Member States have the capacity to meet them.***

The Mission Statement of IOC's Capacity Development Strategy:

***The IOC will undertake relevant actions to assist Member States with developing and sustaining the necessary capacity to undertake activities necessary to achieve the IOC vision at the national level as well as at the international cooperation level.***





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# Outputs and Activities

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1. Human Resources developed
2. Access to physical infrastructure enabled or improved
3. Global, regional and sub-regional mechanisms strengthened
4. Development of ocean research policies in support of sustainable development objectives promoted
5. Visibility and awareness increased
6. Sustained (long-term) resource mobilization reinforced



Output	Activity
1. Human resources developed	1.1 Academic (higher) education 1.2 Continuous professional development 1.3 Sharing of knowledge and expertise/ community building 1.4 Gender balance
2. Access to physical infrastructure established or improved	2.1 Facilitating access to infrastructure (facilities, instruments, vessels)
3. Global, regional and sub-regional mechanisms strengthened	3.1 Further strengthening and supporting secretariats of regional commissions 3.2 Enhance effective communication between regional sub-commission secretariats and global programmes as well as other communities of practice (incl. other organisations)
4. Development of ocean research policies in support of sustainable development objectives promoted	4.1 Sharing of information on ocean research priorities 4.2 Developing national marine science management procedures and national policies
5. Visibility and awareness increased	5.1 Public Information 5.2 Ocean Literacy
6. Sustained (long-term) resource mobilization reinforced	6.1 In-kind opportunities 6.2 Financial support by Member States to IOC activities



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# IOC Assembly XXVIII (2015)

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## Resolution IOC-XXVIII-2

- The IOC global and regional programmes needed to develop programmatic and regionally relevant capacity development work plans
- Document submitted to the IOC-XXIX with mappings between the six outputs and relevant actions of all IOC programmes
- IOC CD Strategy outputs compared with the IOC Criteria and Guidelines on the TMT
  - *instruments, equipment, vessels, processes and methodologies required to produce and use knowledge to improve the study and understanding of the nature and resources of the ocean and coastal areas*





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# IOC Assembly XXIX (2017)

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

The tasks of the GE-CD are:

- Assist global and regional programmes with the implementation of capacity development **needs assessments** in a consistent manner;
- Assist global and regional programmes with the development of programmatic and regionally relevant capacity development **work plans**
- Assist with the mobilization of **financial and in-kind resources**;
- Provide advice to global and regional programmes on **relevant methods and tools to improve the quality and impact of CD efforts**;
- **Advise the Assembly on, and start implementation of the Transfer of Marine Technology Clearing House Mechanism (CHM)**





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# First Session GE-CD

## Paris, 21-23 March 2018

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- Reviewed the current IOC programmes CD activities
- Reviewed the current Regional Sub-Commissions CD activities and needs
- Did a Gap Analysis for existing CD work plans





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# First Session GE-CD

## ISSUES RAISED

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1. Need to capture the needs of SIDS, LDCs and the MSs that are currently not member of any of the 3 Sub-Commissions and IOCINDIO Regional Committee
2. Need to agree on the meaning of CHM to further develop it





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# First Session GE-CD ACTIONS

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Established 2 Task teams:

- **Task Team on the implementation of a TMT/CHM portal and related activities**, to further seek answers on the questions and issues formulated by the sessional working group on TMT/CHM and taking into account the Decade preparations.
- **Task Team on Capacity Development Requirements** to identify CD requirements of Member States in relation to the IOC CD strategy





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# Survey on CHM/TMT and MSREQ

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An **online survey** was jointly developed by the two task teams. Lunched on the 5th October 2018 and remained open until 14th February 2019

IOC Member States were invited to contribute to the survey via **Circular Letter 2738**. The CL also invited Member States to designate an **IOC National Focal Point in Capacity Development**

The survey was open to all stakeholders including IOC NFPs, representatives of institutes and regional programmes.





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# Response

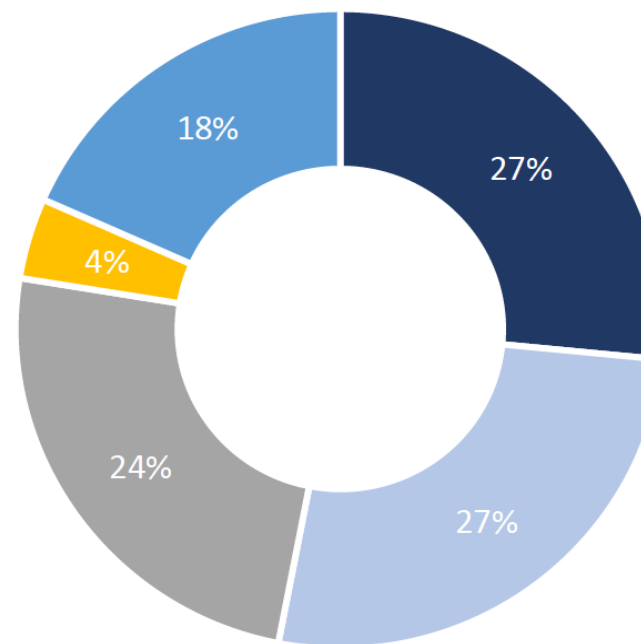
49 responses overall:

13 Africa

12 IOCARIBE

13 WESTPAC

11 other



■ IOCAFRICA ■ WESTPAC ■ IOCARIBE ■ IOCINDIO ■ None of the above



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# IOCARIBE response

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## 11 responses from IOCARIBE MSs

- Antigua and Barbuda, Aruba, Brazil, Colombia, Dominican Republic, Grenada, Mexico, Panama, Trinidad and Tobago
- 5 SIDS

= limited response



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# Analysis 1/6

Q4: Differences IOCARIBE overall and IOCARIBE SIDS with priority on funding and investments for SIDS

Q5: Same results for IOCARIBE overall and IOCARIBE SIDS

Q4: most important capacity development needs		
	IOCARIBE	IOCARIBE_SIDS
1	Advanced professional development training (specific short courses, technical training etc.) / Qualified ocean science professionals	Funding and investment in ocean science
2	Funding and investment in ocean science	Advanced professional development training (specific short courses, technical training etc.)
3	Ocean observation equipment (buoys, AUVs, tide-gauges etc.)	Qualified ocean science professionals / Ocean observation equipment (buoys, AUVs, tide-gauges etc.)
Q5: In terms of developing capacity in human resources, how useful are the following for your country or region? How useful are the following for your country or region		
1	Support for organization of training courses, workshops and summer schools relevant to the IOC mandate	Support for organization of training courses, workshops and summer schools relevant to the IOC mandate
2	Establishment of an internship/fellowship programme	Establishment of an internship/fellowship programme
3	Establishment of regional training (and research) centers relevant to the IOC mandate	Establishment of regional training (and research) centers relevant to the IOC mandate / Establishment of a visiting lecturer programme



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## Analysis 2/6

Q6: Differences for IOCARIBE overall and IOCARIBE SIDS with needs for creation of a register of infrastructure for SIDS

Q7: Same results for IOCARIBE and IOCARIBE SIDS

Q8: Same results for IOCARIBE and IOCARIBE SIDS

Q6: In terms of increased access to physical infrastructure, how useful are the following for your country or region?		
	Expanded access to regional scientific research infrastructure	Establishment and maintenance of a register of regional scientific research infrastructure (facilities, instruments, vessels) to facilitate access / Expanded access to regional scientific research infrastructure
Q7: If applicable, how would you rate your country's needs with regard to strengthening coordination with global, regional or sub-regional IOC communities and local networks?		
	Establishing an effective coordination and communication mechanism between the regional sub-commissions and the global programmes	Establishing an effective coordination and communication mechanism between the regional sub-commissions and the global programmes
Q8: In terms of development of ocean research policies in support of sustainable development, how useful are the following for your country or region?		
	Assistance with the development of national marine science management procedures and national policies	Assistance with the development of national marine science management procedures and national policies



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# Analysis 3/6

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Q9: Same  
results

Q10: Same  
results

Q9: In terms of increasing visibility and awareness of ocean research in your country how useful are the following for your country or region?		
	Support for communicating ocean science research to policy makers	Support for communicating ocean science research to policy makers
Q10: In terms of mobilizing sustained (long-term) resources, how useful are the following for your country or region?		
	Assistance in financial resource mobilization from Member States, Institutional and Private Sector Partners	Assistance in financial resource mobilization from Member States, Institutional and Private Sector Partners



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## Analysis 4/6

Q11: GOOS is the most used platform for both IOCARIBE and IOCARIBE SIDS

Q14: Same priority for both IOCARIBE and IOCARIBE SIDS but difference in the second priority

Q11: Which existing marine information portals are you aware of, that are in use in your country or region		
1	Global Ocean Observing System (GOOS) ( <a href="http://www.goosocean.org">http://www.goosocean.org</a> )	Global Ocean Observing System (GOOS) ( <a href="http://www.goosocean.org">http://www.goosocean.org</a> )
2	Global Ocean Science Report ( <a href="https://en.unesco.org/gosr">https://en.unesco.org/gosr</a> )	Ocean Biogeographic Information Systems (OBIS) ( <a href="http://www.iobis.org">http://www.iobis.org</a> ) / Global Ocean Science Report ( <a href="https://en.unesco.org/gosr">https://en.unesco.org/gosr</a> )
3	Ocean Literacy Portal ( <a href="https://oceanliteracy.unesco.org">https://oceanliteracy.unesco.org</a> ) / Ocean Biogeographic Information Systems (OBIS) ( <a href="http://www.iobis.org">http://www.iobis.org</a> )	<u>OceanExpert</u> ( <a href="https://www.oceanexpert.net">https://www.oceanexpert.net</a> ) / IOC Capacity Development Portal ( <a href="http://www.ioc-cd.org">http://www.ioc-cd.org</a> )
Q14: In the context of priority areas of research and development for the UN Decade of Ocean Science for Sustainable Development 2021-2030, please rank your countries top 5 priorities		
1	Capacity development and accelerated technology transfer, training and education, ocean literacy	Capacity development and accelerated technology transfer, training and education, ocean literacy
2	A quantitative understanding of ocean ecosystems and their functioning as the basis for their management and adaptation / Ocean in earth-system observation, research and prediction, with engagement of social and human sciences and economic valuation	Ocean dimension in an integrated multi-hazard warning system



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# Analysis 5/6

Q15: differences for  
IOCARIBE overall and  
IOCARIBE SIDS

Q15: What information should a Clearing House Mechanism include?		
1	Universities and other <u>organisations</u> offering study grants and facilities in marine science	Workshops, seminars and training courses at global, regional and sub-regional level, in particular those offering financial support
2	Workshops, seminars and training courses at global, regional and sub-regional level, in particular those offering financial support	Universities and other <u>organisations</u> offering study grants and facilities in marine science
3	Offers of cruise studies at global, regional and sub- regional level	Opportunities for participation in projects or initiatives



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Q16: differences for  
IOCARIBE overall and  
IOCARIBE SIDS

## Analysis 6/6

Q16: The following is a list of what is considered marine technology for purposes of the IOC's Criteria and Guidelines for the Transfer of Marine Technology. Please rank on a scale of 1 to 5, with 5 indicating the most important and 1 the least important.		
1	Information and data	Online or blended learning, ocean-related courses and MOOCs
2	Expertise, knowledge, skills, technical/scientific/legal know-how and	Expertise, knowledge, skills, technical/scientific/legal know-how and / Information and data
	Online or blended learning, ocean-related courses and MOOCs / Sampling and methodology equipment Observation facilities and equipment	



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# Summary: CD needs and priorities

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1. Funding and investment in ocean science
2. Support for organization of training courses, workshops and summer schools relevant to the IOC mandate
3. Expanded access to regional research infrastructures
4. Better coordination and communication between IOC global programmes and regional sub-commission
5. Assistance in the development of national marine science policies
6. Support for communicating science to policy-makers
7. Assist in resource mobilization (including through partnerships with different stakeholders)



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# Summary:CHM

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- Main portals already used:
  - GOOS, Ocean Literacy Portal, OBIS
- Priority for the UN Decade of Ocean Science:
  - Capacity development and accelerated technology transfer, training and education, ocean literacy
  - Ocean dimension in an integrated multi- hazard warning system (for IOCARIBE SIDS)
- Information to include in the CHM/TMT
  - Workshop seminars and training courses for IOCARIBE SIDS, and universities offering study grants for IOCARIBE overall
- What is considered marine technology
  - Information and data for IOCARIBE overall, and Online or blended learning, ocean-related courses and MOOCs for IOCARIBE SIDS



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# Clearing House

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What is the Clearinghouse Mechanism (CHM)?

What objectives should it fulfil?

to transfer MT to “**developing States**, particularly landlocked and geographically disadvantaged States as well as other developing States **which have not been able to establish or develop their own capabilities in marine sciences, scientific research, observations of the oceans and coastal areas, and related technology, or to develop the infrastructure needed to achieve such ends**” (IOC CGTMT);

“..provide interested users in Members States with **direct and rapid access to relevant sources of information**, practical expertise in the transfer of marine technology, as well as facilitate effective scientific, technical and financial cooperation to that end (IOC CGTMT)”.

“become the **primary information repository to support the international conventions and agreements** and at the same time provide a platform to **share information, build partnerships and forge collaboration for the growth and transfer of marine technology in developing countries** (IOC 2017).

**CHM to provide information and facilitate technical and scientific cooperation.**



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# CHM components

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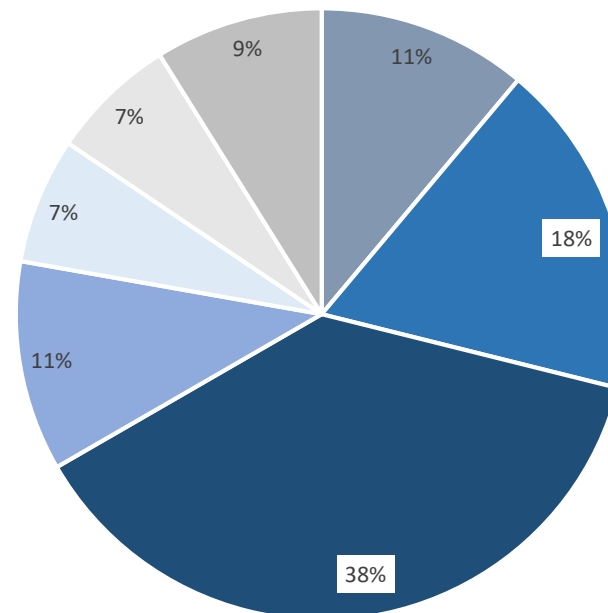


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# Preferred model

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Model/format for the Clearinghouse mechanism



- Online Central Portal
- A hybrid model: online central portal with deep-links to regional/sectoral CHM portals
- A hybrid model: online central portal integrating the data and information harvested from regional/sectoral CHM portals (need for interoperability)
- Online central portal with a human brokerage element to actively connect demand to offer (and vice versa)
- Online central portal focused on moderated online discussion groups, networks and community forums for user-led connections and driven by demand
- Only regional portals
- Other not Included above



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## IOCARIBE Pilot

Developed by  
INVEMAR Colombia  
(home of CMA2)

# PILOT



Home Cargar archivo  

## Clearing-House Mechanism LAC

Provide interested users in Member States with direct and rapid access to relevant sources of information, practical expertise in the transfer of marine technology, as well as to facilitate effective scientific, technical and financial cooperation to that end

Experts

Search

### Experts



122

Information on people.

### Documents



194

Mainly grey literature, manuals and guidelines.

### Training



466

Training and education opportunities

### Laboratories



2

Information on Laboratories.

### Institutions



96

Information on institutions.

### Geospatial information



6

Maps and atlases.

### Vessels



80

information of vessels.

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# Next?

## *One Planet, One Ocean*

1. CD Work Plans: IOCARIBE and other regions: **develop CD work plans** taking into account strategy's 6 outputs
2. National Focal Points for CD
  - Appointed in: Brazil, Colombia, Trinidad and Tobago
  - **NEEDS WORK!**
3. Repeat the CD survey biannually, and ensure synergies with GOSR, and UN Decade of Ocean Science, and other initiatives promoting CD
  - Should the survey be re-opened and who should be invited to fill it?
4. CHM/TMT
  - IOCARIBE project?
5. IOC-30: **presentation** of regional CD work plans