



United Nations  
Educational, Scientific and  
Cultural Organization



Intergovernmental  
Oceanographic  
Commission

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**Input #3 – Global and Regional Programmes**  
**Input #4 – Specialized UN agencies, non-UN IGOs,  
global and regional projects, NGOs, etc.**

**Johanna Diwa - IOC CD Consultant - 12 February 2021**

**2nd Meeting of GE-CD Task Team on  
Revision of IOC CD Strategy**

# Input #3 – Global and Regional Programmes (6 responses out of 12)

CG/CARIBE EWS, IOC CARIBE ARUBA, ICG/PTWS, ICG/NEAMTWS, IOTWMS

## **Possible gaps** identified in the current IOC CD Strategy, particularly taking into account the Decade objectives and expected outcomes

- Support as a **country, interest** on the part of decision-making and institutions
- **Identification of funding opportunities and technology transfer**
- **Risks** to strategy implementation outside of our control i.e. Covid-19
- Not many of the Indian Ocean member states under the Intergovernmental Coordination Group for Indian Ocean Tsunami Warning and Mitigation System are aware of the IOC Capacity Development Strategy

## **Proposed elements as additional components** in revision of the IOC CD strategy

- Hold meetings with decision makers, **countries should be more energetic and developers of IOC guidelines**
- I would suggest to have **online regional training/workshops for the IOCARIBE focal points**
- **A guide and support on resource mobilization** to implement this Capacity Development Strategy



# Input #3 – Global and Regional Programmes (6 responses)

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## How should the IOC CD strategy contribute to the Decade and its implementation plan?

- Depends on the countries that must seriously follow these guidelines as compliance
- Give priority to **SIDS (small island developing states)** and **LDCs (least developed countries)**
- **Align with the priorities** established in the programs in the framework of the Decade (e.g. Tsunami Ready)
- Promoting development & implementation of **integrated monitoring & warning systems** (weather, sea level, seismic, tsunami) - regionally and globally
- Understanding the **needs of the end user (public)** and use this information to build an effective, efficient and reliable monitoring and warning system
- **Foster basin wide cooperation** namely between NEAM and Caribbean and Indian and Pacific keeping in mind global cooperation
- IOC should **promote interoperable crowd** data to be used in different fields of ocean science
- IOC should promote **citizen science (scientific work undertaken by members of the general public, often in collaboration with or under the direction of professional scientists and scientific institutions)**
- IOC should promote citizen-science projects that will **serve education and outreach goals** namely in tsunami awareness
- Back up all of the societal outcome of the UN Decade for Ocean Science
- Links with **“leave no one behind”** by reducing the gap between those having advanced knowledge and capacity with those lacking capacity and opportunities

# Input #3 – Global and Regional Programmes (6 responses)

CG/CARIBE EWS, IOC CARIBE ARUBA, ICG/PTWS, ICG/NEAMTWS, IOTWMS

## Important global ocean science developments the updated IOC CD strategy should recognize and respond to

- Global scientific developments like **artificial intelligence and behavioral sciences** (improve tsunami response)
- More on **visibility and awareness**, especially through ocean literacy
- **Next-generation monitoring and forecasting** (e.g. cables, satellite, etc) for all ocean hazards and risks
- **Use of smart telecom cables** to establish real-time submarine observatories to be used in Tsunami Early Warning
- Use of **constellations** of altimetry satellites for tsunami detection
- Use of **Machine Learning and data mining tools** for quality control of data and to do real time impact assessment studies
- Use of **nanosats and drones** to monitor the ocean surface namely, oil spills, illegal fisheries, and environmental disasters
- Detection of gravitational waves to detect mega earthquakes that can trigger tsunamis
- **Manual and guidance on resource mobilization** to support the Capacity Development Strategy.



# Input #4 – Specialized UN agencies, non-UN IGOs, global and regional projects, NGOs, etc. (10 responses of 35 requests)

UNESCAP, FAO, IMO, ISA, WMO, UNESCO, UNDOALOS, DESA, IHO, SARGASSO



## Possible gaps in your CD strategy/programmes that can be addressed in collaboration with the IOC

- An opportunity to join forces with WESTPAC maximizing resource utilization including expertise and infrastructure
- In the context of COVID-19, opportunity to build back better for an inclusive, efficient and sustainable recovery
- Increased inter-agency collaboration and the facilitation of data and information amongst UN agencies, interoperable datasets
- Access to research (e.g. WMU, IMLI) and identification of research priorities
- Increasing visibility which in turn will lead to increased awareness and ocean literacy
- Absence of initiatives that focus on the capturing and storage of scientific DATA. Greater focus needs to be made in relation to data management and the transfer and dissemination of data
- Ensure that activities designed and implemented in relation to the conduct of marine scientific research undertaken in national jurisdictions, when relevant, can be jointly organized with ISA to address needs and priorities of member States
- Blended approach to training – online and face to face
- Building capacity in developing countries and SIDS (across the value chain), development and/or delivery of decision-making support tools and inclusive stakeholders engagement processes for trade-offs development, consensus building and integrated solutions in SIDS coastal development planning

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## Possible gaps in your CD strategy/programmes that can be addressed in collaboration with the IOC

- Connecting the regional training between WMO and IOC - and developing core packages for the regional needs
- Linking the WMO and IOC Capacity Development strategies
- Linking the JCB to the respective WMO and IOC Capacity Development Working Group and Panels, respectively
- Joint training on science-policy interface and demand-based training in MSR
- Establish the necessary knowledge base to facilitate cooperation between marine scientists and **underwater archaeologists**
- Mapping of projects in **underwater cultural heritage** that use marine sciences to retrieve historical and environmental data contained in archaeological contexts, of marine science projects that use social and historical data in their studies, and of institutions implementing these projects
- Contribute to a **holistic mapping of oceans that comprise natural, cultural and historical resources** with a view to supporting **integrated ocean management solutions**



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## Proposed elements as additional components in IOC CD Strategy similar to organization's targets

- ESCAP's research and analytical work, **accelerator methodology for SDG 14; joint ocean-related knowledge products** such as technical papers and policy briefs
- **Investment in research projects**: e.g. WMU, an IMO maritime centre of excellence, established a research project on Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development
- One possible core is to develop **mechanisms for monitoring, evaluation and learning to assess the quality and impact of the capacity development activities**
- **Avoid duplication and fragmentation** of CD activities and maximize synergies
- Communicate about **heritage and cultural issues, underwater cultural heritage**
- **Policy coherence** with regards, not only to existing ocean research priorities, but to other sustainable development policies
- Collecting and documenting **indigenous knowledge** and incorporating traditional knowledge in ocean science organically
- **Interoperable and open-access data platforms and services; and interoperable maritime datasets**
- **Ocean governance issues**



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## Important global ocean science developments the IOC CD strategy should recognize and respond to

- Better **synergies** with the private sector
- **Key UN processes** relying on sound science to inform decision making in the next Decade
- **Analysis of new trends and emerging issues** in the context of management and policy implications and to provide guidance and advice on **management/policy guidelines**
- The integration of **natural sciences and societal disciplines into a holistic assessments** of the marine environment:
- ISA's specific and exclusive mandate assigned to it by **UNCLOS and the 1994 Agreement**
- Underwater cultural heritage
- **Science-policy framework** within and across governance arrangements
- Synergies between the UN Decade for Ocean Science and the **UN Decade for Ecosystem Restoration** should be sought. Ocean science informs coastal ecosystem restorations. In that context, the **unique vulnerabilities of SIDS** should be recognized
- Increase **big data processing capacity**
- **Marine spatial planning** that is based on easily accessible, combined and georeferenced ocean science
- Developing **e-learning capabilities** should therefore be part of any CD strategy.



THANK YOU

