



## Report of Executive Secretary on Programme and Budget Implementation

(for the time period since Assembly-30 in June/July 2019)

**Dr Vladimir Ryabinin and IOC Team** 

UNESCO, 3 February 2021





## **Existing, Developing, Emerging and Potential**

Components of IOC Work

Regular Mandate

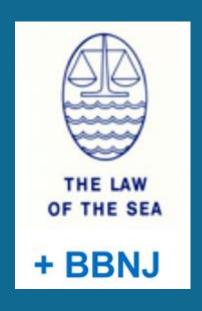
**Decade** 

**BBNJ** 

**UNFCCC** 









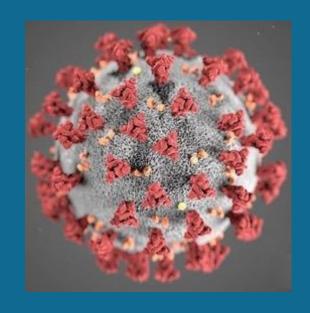
## July 2019 – February 2021: key Influencers











**Decade** 

High-Level Panel for a Sustainable Ocean Economy

Covid-19

Remedial actions and course correction



# Existing, Emerging and Potential Components of IOC Work



Integrated Ocean Management

These factors will keep shaping the future of IOC work

## **Growing IOC External Partnership Portfolio**

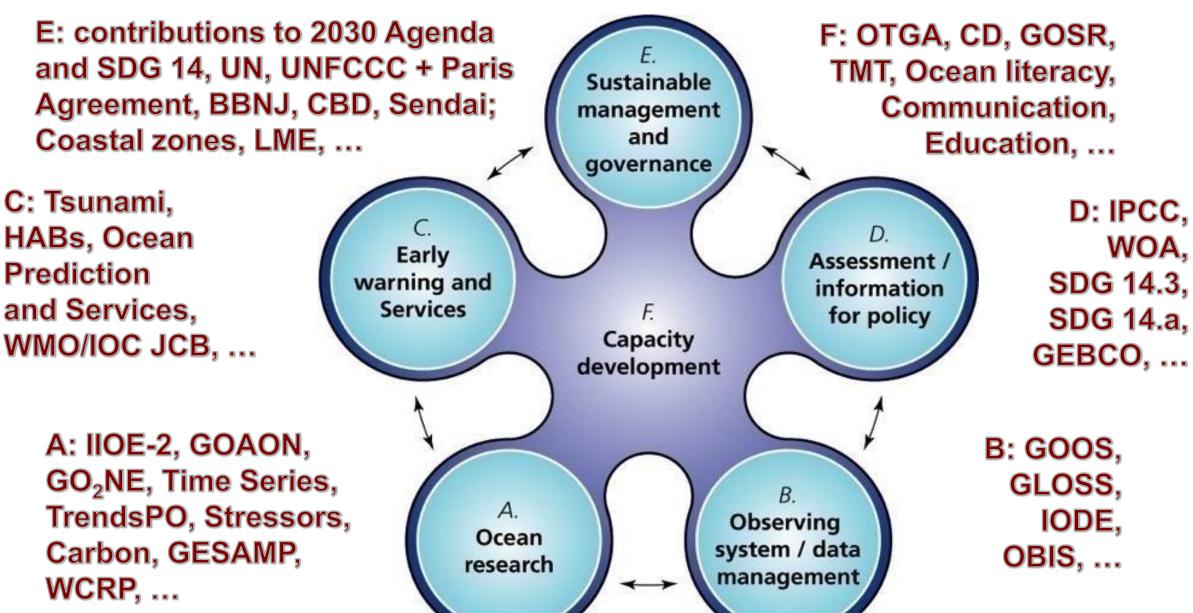
UN & UN Agencies, Intergovernmental Organizations, International Organizations Non-governmental Organizations, Philanthropy, Associations, Institutes, Projects

MoUs to be signed with IGOs: Indian Ocean Rim Association, Pacific Community

## **IOC in UNESCO: Highlights**

- Support to IOC on importance and budget, major interest in the Decade
- Strategic Positioning IOS review starting
- Priority work on Africa, gender, growing focus on SIDS
- IOC functional autonomy respected in UNESCO, double reporting
- Cooperation with UNESCO Sectors:
   SC (climate, hydrology, biodiversity); CLT (UCH), SHS (Ethics, AI), ED (OL)

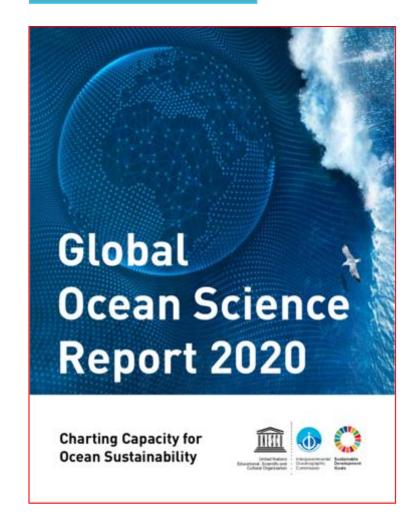
## Reporting on IOC Functions – highlights only



## Function A(D,F)

## **Global Ocean Science Report**





GOSR portal – place to access and update data <a href="https://gosr.ioc-unesco.org/">https://gosr.ioc-unesco.org/</a>

SDG Indicator 14.a.1 (<u>IOC - custodian agency for the indicator</u>): proportion of total research budget assigned to ocean science:

now globally 1,7%

**Confirmed the + role of international cooperation** 

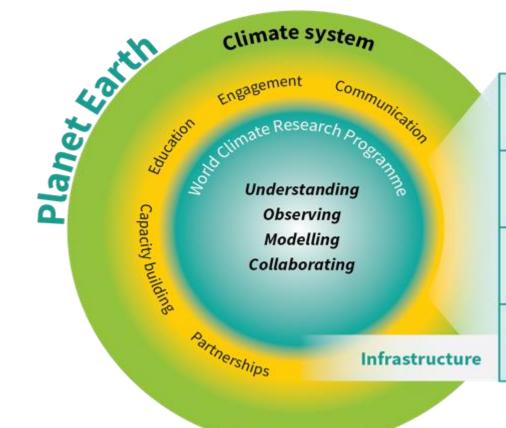
Benchmark at the start of the Decade

Analysis of Covid-19 impact on ocean science, 2021

## **Function A**







- Fundamental understanding of the climate system
- Prediction of the near-term evolution of the climate system
- 3 Long-term response of the climate system
- Bridging climate science and society

Earth System Change

My Climate Risk

**Digital Earths** 

Interactions across spatial and temporal scales

Safe Landing Climates

WCRP Academy



Appropriate new Sponsorship MoU to be worked on

#### **Function A**

## **Integrated Ocean Carbon Research (IOC-R)**

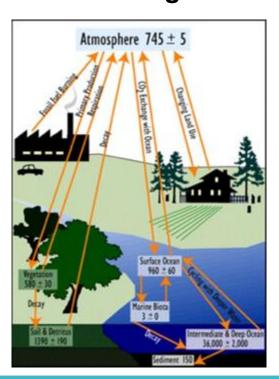


#### **Current Objectives:**

Decrease uncertainty and understand processes. - ±28%

**Future Objectives** 

Climate Mitigation and Ocean Ecosystem Health













98



HIGH LEVEL REVIEW OF A WIDE RANGE OF PROPOSED MARINE **GEOENGINEERING TECHNIQUES** 

**GESAMP WORKING GROUP 41** 













#### **Function A**

## **Ocean Acidification**

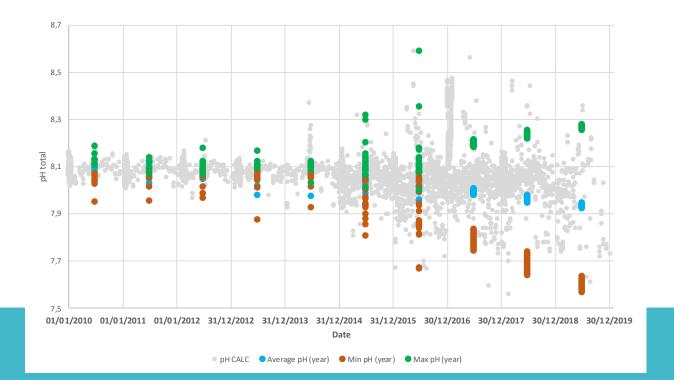


SDG Indicator 14.3.1: Average marine acidity (pH) measured at agreed suite of representative sampling stations (IOC - custodian agency for the indicator).

Reporting via the Ocean Acidification data portal: <a href="https://oa.iode.org/">https://oa.iode.org/</a>

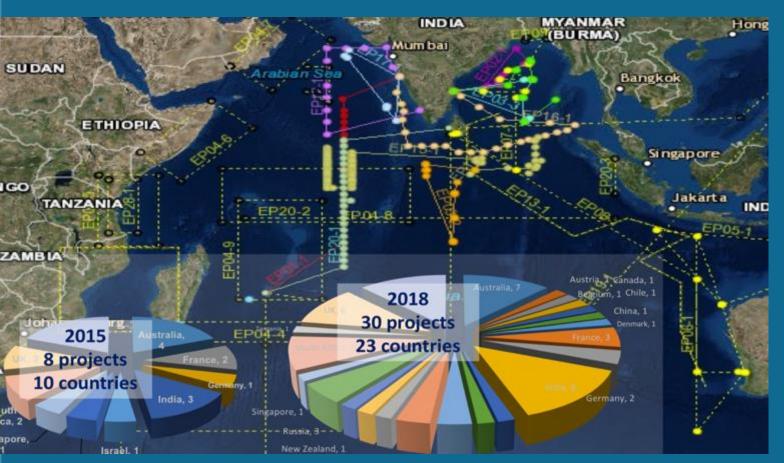
(With strong support by GOAON)







## IIOE-2 (2015->2020->2025)



#### **Perth Programme Office (PPO)**

Change in modality of the Western Australian Government support:

- Cash support for 2021-2024
- Change: to be used locally
  - A Decade Collaborative
    Centre from 2022 considered
    with focus on the
    Australasian and
    Indo-Pacific regions, to be
    developed preferably before
    the IOC 31<sup>st</sup> Assembly

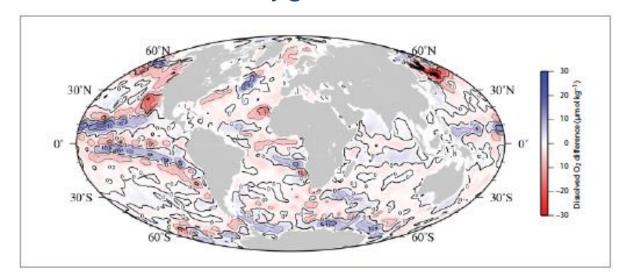
## Functions A,B,D

# United Nations Educational, Scientific and Cultural Organization Cultural Organization Commission

## **Proposal: IOC State of the Ocean Report (StOR)**

An annual, concise but comprehensive, source of key information about state of the ocean

#### Ocean Deoxygenation data



Ocean Variables

Status of ocean observation

Status of ocean planning

Status of ocean protection

. .



IOC

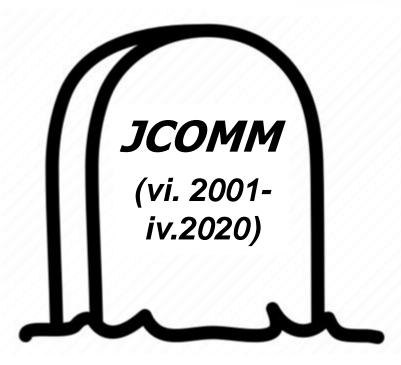
Assembly, EC

Assembly and Executive Council **WMO** 

Cg, EC

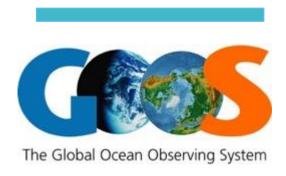
Congress and Executive Council

#### Joint WMO-IOC Collaborative Board



WMO/IOC Joint Collaborative Board: Plan of WMO and IOC cooperation: 2021 ->

	*			1	*
Observations		-	GOOS Global Ocean Observing System  GCOS Global Climate Observing System		INFCOM  Commission for Observation,  Infrastructure and
Data	IODE International Oceanographic Data &	_			Information-Systems
Forecast Systems			GOOS		
Services	TOWS  Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems				SERCOM  Commission for Weather, Climate, Water and Related Environmental Services and Applications
	Associated				
Research	research community		WCRP		Research Board
Capacity development	Group of Experts CD				CD Panel









Steering Committee Co-Chairs: Anya Waite & Toste Tanhua

## JCOMMOPS -> OceanOPS



- JCOMMOPS IOC/WMO joint office rebranded into OceanOPS
- 5-year strategy released
- 2020 Report Card on GOOS status (incl. COVID impact survey) using Sphilaus Ocean projection
- A WMO office in France/Brest, with financial support from WMO regular budget for manager
- Highlight: cooperation IOC/UNESCO & Vendee Globe Race







To monitor and report on the status of the global ocean observing system and networks, to use its central role to support efficient observing system operations, to ensure the transmission and timely exchange of high quality metadata, and to assist free and unrestricted data delivery to users across, operational services, climate and ocean health.

Montaining for the improvement specific transport of the province of the provi

Place and meeting name

Date

## Report Card 2020: state of observing system



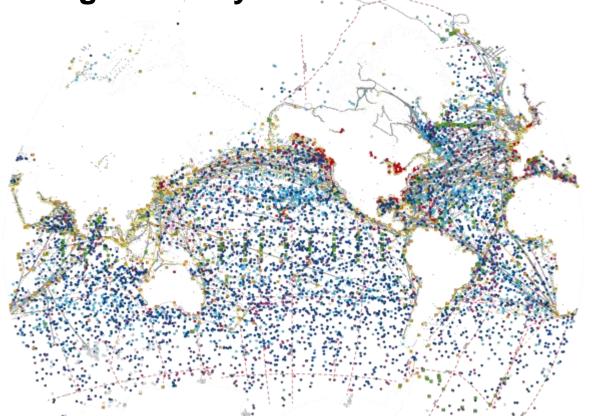


Cultural Organization . Commission

9,349 in situ platforms by 86 Member States

Increasing ability WRT biogeochemical and

biological/ecosystem variables





|--|

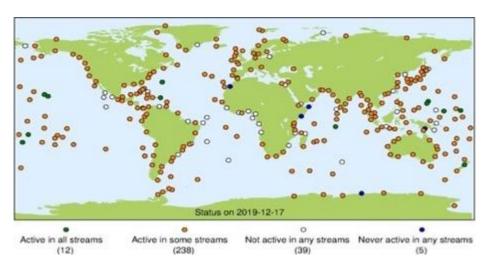
SOOS in situ	Covid-19 impact			
networks	June 2020	Projected status December 2020		
Ship based meteorological measurements	Minor	Minor		
Ship based aerological measurements	Minor	Minor		
Ship based oceanographic measurements (XBT)	Major	Major		
Sea level gauges	Minor	Minor		
Drifting and polar buoys	Minor	Minor		
Moored buoys	Minor	Minor		
Interdisciplinary moorings	Medium	Medium		
Profiling floats	Minor	Minor		
Repeated hydrographic transects	Major	Medium		
OceanGliders	Medium	Minor		
HF radars	Minor	Minor		
Animal borne ocean sensors	Minor	Medium		





- GLOSS Data Archaeology (IOC, 10-12.3.2020)
- Manual on SL Measurements
   & Interpretation, Volume V:
   now available in 4 languages
- Manual on QC/QA.











On the rise. Several key activities started in 2020.



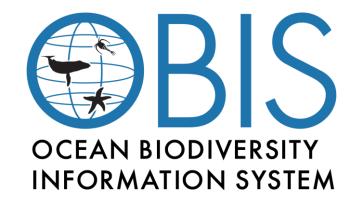
Funded by Government of Flanders, Kingdom of Belgium:

- IOC Ocean InfoHub, 2020-2023, access to marine and coastal data and information (focus on LAC, Africa, P-SIDS)
- CD: OceanTeacher Global Academy 2 project (to further improve the flagship IOC-OTGA initiative (focus on all regions)
- Pacific Islands Marine bioinvasions Alert Network 2020-2023 (P-SIDS)

Development of ODIS (e-environment for discovery of and access to data, information and associated products or services)

WOD Cloud upgrade for submission and extraction of data to WOD (cooperation with RevOcean/ODF/C4IRO)

Data Community Building for the Decade. A Decade data conference.







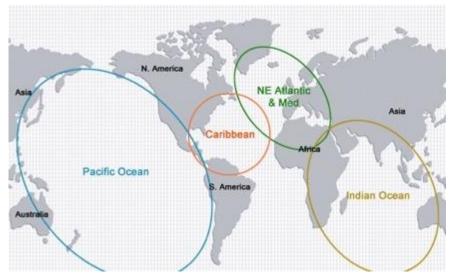
#### **Function C**

St. Patrick, Grenada

is Tsunami Ready

## **Tsunami Warning Services**





- Carriacou, Grenada is Tsunami Ready

- Technical WG/TT/expert meetings/trainings
- CARIBEWave, IOWave, NEAMWave (some – postponed)
- World Tsunami Awareness Day (WTAD) -5<sup>th</sup> November 2020: a 30-day campaign with UNDRR including 5 regional webinars
- **Central American Tsunami Advisory Center** in trial mode from August 2019
- South China Sea Tsunami Advisory Center operational 6 November 2019
- IPMA (Portugal) accredited as Tsunami Service Provider (TSP) in NEAMTWS area

#### **Function C**

## Tsunami Warning Services





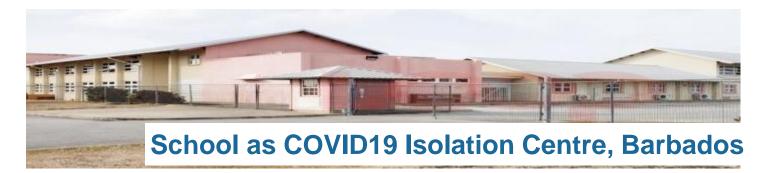


ducational, Scientific and Oceanograph
Cultural Organization Commission

#### COVID19



Short-term and long-term assessments



Asia-Pacific

Tropical Cyclone Harold clean-up hampered by coronavirus with Vanuatu reluctant to open borders



Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS)

Guidelines for Tsunami Warning Services,

**Evacuation, and Sheltering during COVID-19** 

## **Function C**

## Harmful Algal Blooms



• 1st ever global IOC, ICES, PICES, IAEA Global HAB Status Report reporting on impacts of HABs to be launched February 2021



- IPHAB XV: online, March 2021
- Task Team on Early Detection, Warning & Forecasting HAB Events:
   Guidelines for EWS for HABs. FAO implementer of demonstration project
- Joint with GESAMP, 2022: Open Science Meeting on drivers of Sargassum population dynamics as a basis for modelling, forecasting and mitigation.
- Best Practice Guidelines for the Study of HABs and Climate Change.
- IOC-SCOR GlobalHAB: postponed.

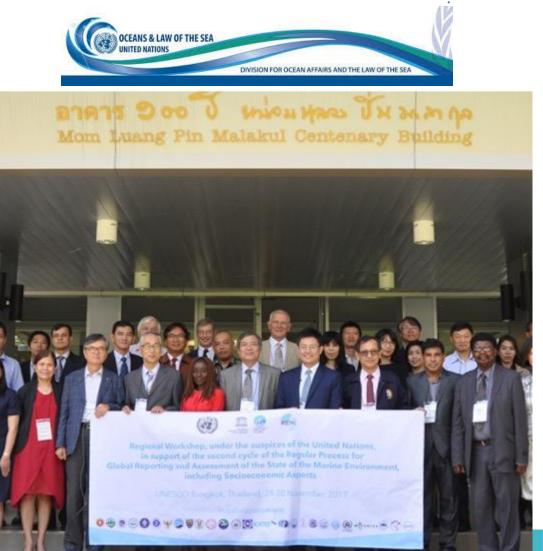


#### **Function D**

## World Ocean Assessment 2<sup>nd</sup> Cycle



- IOC contributed data & information
- IOC recommends that UN agencies review the draft report of the 3rd cycle
- Exploring options with UN DOALOS to strengthen the links between the 3<sup>rd</sup> cycle of the Regular Process and the Ocean Decade (e.g. in CD and science policy interface)
- In making: a joint event on the sciencepolicy interface in advance of the launch of the 2<sup>nd</sup> WOA (date TBC)



## Function D (B)

## **GEBCO**









Educational, Scientific and Oceanographic
Cultural Organization Commission

- Hosting of the GEBCO Symposium and Guiding Committee – Focus on the UN Ocean Decade (January 2021)
- New GEBCO Chair, appointment of 2 new IOC members to GGC
- Seabed 2030 guidance through Sponsors meeting (with IHO and NF) and GEBCO GC
- IOC GEBCO User Requirement Working Group established (Chair: IOC Officer F. Nogueira, Report to IOC-XXXI





6% -> 19%

## **ILBI on BBNJ**







United Nations

United Nations

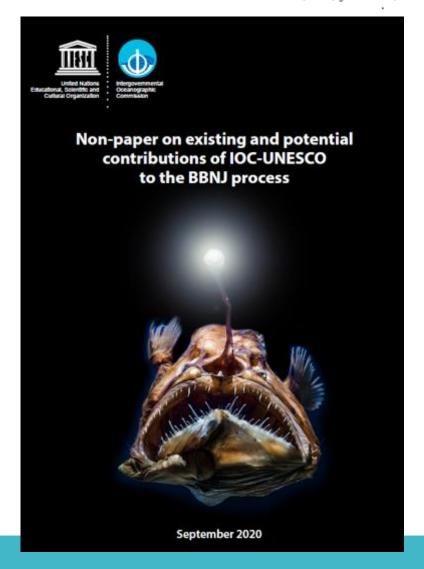
Intergovernment

Cultural Organization

Cummission

Commission

- 4<sup>th</sup> meeting of UN Intergovernmental Conference suspended
- Revised draft text of ILBI (November 2019) refers to potential for IOC to manage Clearing House Mechanism on TMT
- IOC Non-Paper:
   describes existing, new & expanded services
   of the IOC that could support a future ILBI. It
   will inform intersessional work and
   negotiations when they recommence



## Function E (based on D)











United Nations - Intergovernmer
Educational, Scientific and - Oceanographic
Cultural Organization - Commission

• UNFCCC CoP-25 held in Madrid, Spain (December 2019) IOC: Ocean Day, UN-Oceans side event, Ocean Community

Ocean – Climate Dialogue - mandated outcome of CoP-25:

Road to CoP – 26 in Glasgow ("Blue CoP"?)

Ocean and Climate
Change Dialogue
to consider how to
strengthen adaptation
and mitigation action

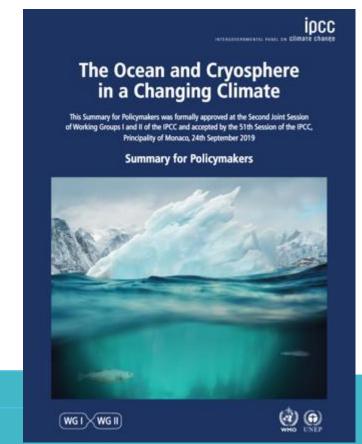






2 December 2020 21:30-24:00 CET / 08:30-11:00 (next day) Fiji time

3 December 2020 21:30-24:00 CET / 08:30-11:00 (next day) Fiji time



## **Convention on Biological Diversity**









- DIOIOGICAL DIVEISITY

  Cultural Organization Commission United Nations Educational, Scientific and Cultural Organization
- Involvement in developing a post-2020 global biodiversity framework (GBF)
- Input to the definition of targets and indicators for the post-2020 GBF, including Recommendations to ensure coordination with OBIS and GOOS
- Exploring opportunities for synergies between post-2020 GBF and Ocean Decade
  - o monitoring and evaluation framework
  - o joint analysis of ocean science priorities







- IOC in Advisory Network, Peter Haugan Expert Group Co-Chair
- Report: "Ocean knowledge for a sustainable ocean economy: Synergies between the Ocean Decade and the outcomes of the High Level Ocean Panel":
  - 1. Analyse synergies between the Ocean Panel and the Ocean Decade
  - 2. Set out a process to develop joint initiatives so hat ocean knowledge can underpin sustainable and equitable development



• IOC is a partner in the Sustainable Ocean Plan Action Coalition

## **Marine Spatial Planning**



de littoral à poten





## **MSPglobal ONLINE EVENTS APR - DEC 2020**



40 **EVENTS IN LANGUAGES** 

**MORE THAN** 

100

COUNTRIES

INVOLVED



**MORE THAN** 5.000 PARTICIPANTS



#### **TOPICS**

- √ Climate Change
- ✓ Participative Mapping
  ✓ Gender
- ✓ ICAM/ICZM
- ✓ Ecosystem-based Management
- √ Blue Economy
- ...and others!











MSPGLOBAL2030.ORG

# ICAM, Blue Economy for SIDS and Coastal Risk Reduction for local communities



Sverige



National Consultants to summarize lessons learned and best practices of managing coastal risk from a local community perspective





National Consultants to support the organization of trainings on Marine Spatial Planning and Sustainable Blue Economy





## **GEF Project**



#### **GEF IW: LEARN Phase V**

- Next phase of signature GEF knowledge management and coordination initiative in partnership with UNDP, UNEP and others
- IOC Executing agency building on its work in LMEs, MSP
- Project submitted for GEF CEO Endorsement: January - February 2021

#### Sargasso Sea

- Foundational GEF project in partnership with UNDP, for the stewardship of the Sargasso Sea – Pilot approach for ABNJ Management
- Project preparation phase launched –
   September 2020



## **Function F**

## **Capacity Development**



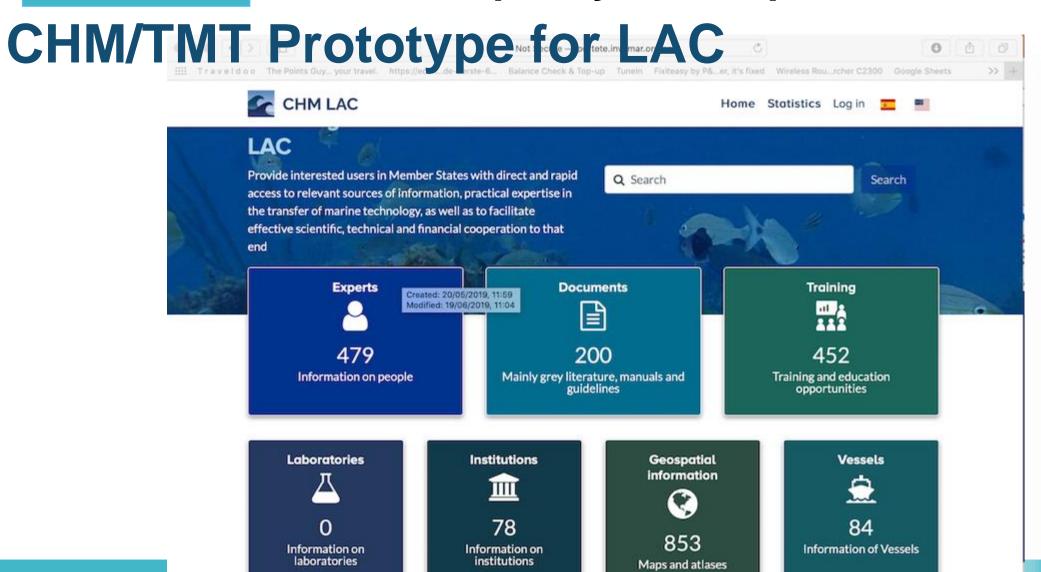
- April 2020:
  - OceanTeacher Global Academy 2 project (Government of Flanders, Kingdom of Belgium) -> new region Pacific!
- September 2020:
   Launch of the second IOC Capacity Development Needs Assessment Survey
  - 9096 emails sent to 115 developing country Member States.
     996 surveys filled (11% response rate below average (29%) for online surveys.
  - Out of 115 developing country Member States only 18 responded.
- October 2020: Second Session of the IOC Group of Experts on Capacity Development Ariel Troisi and Alan Evans re-elected as co-Chairs More at IOC-31
- Good Work of UNESCO C2C Centres in I.R. Iran, India, emerging C2C in Philippines, Chairs

## **Function F**

## **Capacity Development**



Cultural Organization . Commission

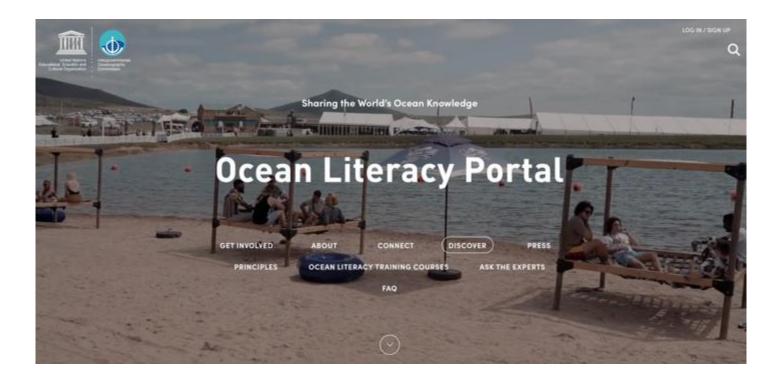


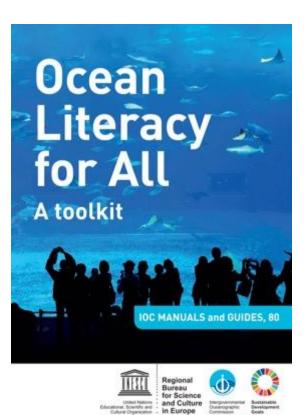
## **Function F**

## **Ocean Literacy**



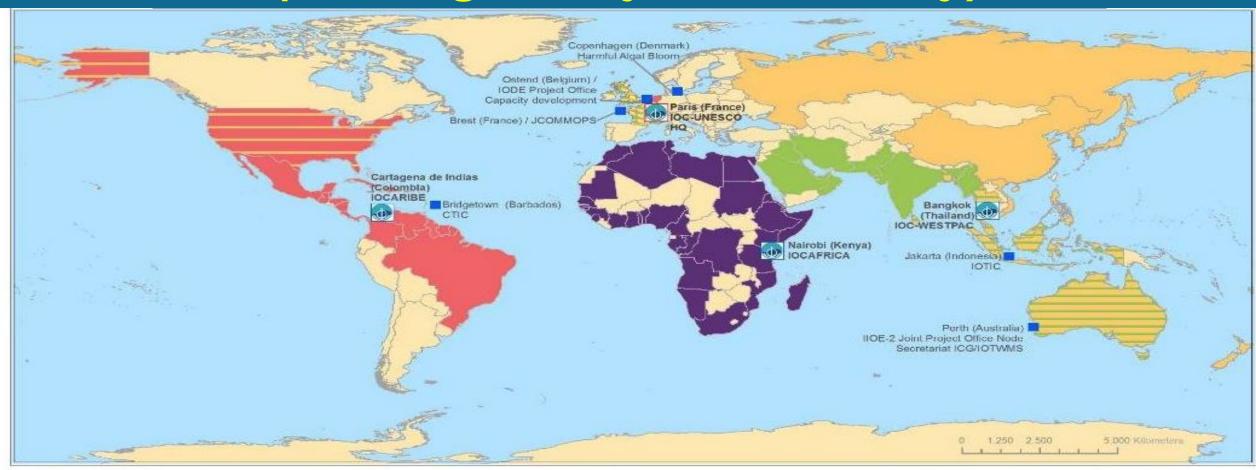
#### Significant outreach, planning, design efforts





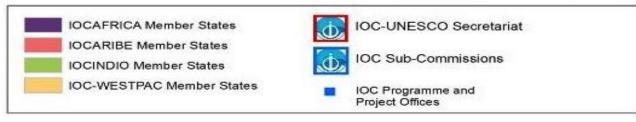
Tested in schools of 36 countries

# IOC work in the regions (Think globally – act locally)



IOC-UNESCO/MPR, 2016

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the IOC-UNESCO.



## **IOCARIBE** ("renessanse" due to covid?)







#### Sargassum:

**Information Hub** 

4 Sargassum Webinars with UNEP, GESAMP, GlobalHAB Sargassum Monitoring / Forecasting System under development with NOAA and UNEP

**HAB-ANCA: Implementing IOC Ciguatera Strategy.** Focus on national standards

**CLME+ Training & Capacity Development Portal launched Caribbean Marine Atlas Project: progress** 

MSP: 8 regional workshops/webinars

**IOCARIBE & IHO Regional work on seabed mapping** 

**LAC Ocean InfoHub** 





















## <u>IOCAFRICA</u>



- ✓ Survey for the comprehensive proposal for an African Ocean Observing System
- ✓ Regional node for the Ocean Info Hub
- ✓ Preparation of training materials for regional training courses impacted by the COVID-19 pandemic, to be organized virtually
- ✓ MSP consultations in 10 Member States Cameroun, Cape Verde, Gabon, Ghana, Kenya, Madagascar, Mauritius, Morocco, Mozambique, and Tanzania. MSP workshop for Gulf of Guinea.
- **✓** Other workshops:
  - Canary Current Eastern Boundary Upwelling workshop (Cape Verde)
  - Tsunamis and other ocean related hazards (Egypt, Nigeria), with UNDRR
  - Virtual conferences on Sargassum (joint with IOCARIBE and UNEP)



## **WESTPAC** development since June 2019



United Nations Educational, Scientific and Cultural Organization





**July-Dec 2019: Field activities** 

Seawater collection and handling for carbonate chemistry, 19 Dec 2019





RTRC-MarBEST on Assessment of Carbon Stock and Sequestration in Seagrass, 4-12 Nov 2019, Bintan Island, Indonesia



RTRC-ODC training on Air-Sea Interactions, 17-28 Jun 2019, Qingdao, China



A Harmful Jellyfish Sampling Protocol Workshop 7-9 Aug 2019, Penang, Malaysia

sensing for Coastal Habitat

Conservation



Ocean Forecasting Services for Coral Reef Conservation, 11-13 Sep 2019, Phuket. Thailand



Distribution, Source, Fate and impact of marine microplastics, 6-8 Nov 2019, Shanghai, China



InOcean Oxygen Network 20-22 Nov 2019, Manila, the Philippines

#### 2020: Webinar Series













INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION COMMISSION OCÉANOGRAPHIQUE INTERGOUVERNEMENTALE COMISIÓN OCEANOGRÁFICA INTERGUBERNAMENTAL MEXITPABUTEЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ ILLE HEAD ILLE MEXITPABUTEЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ は MEXITPABUTEЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ は MEXITPABUTEЛЬ ILLE MEXITPABUTE MEXITPABUTE MEXITPABUTE MEXITPABUTE MEXITPABUTEЛЬ ILLE MEXITPABUTE MEXITPABUT

E-mail: v.ryabinin@unesco.org

政府问海洋学委员会 UNESCO - 7 Place de Fontency - 78352 Paris Cedex 07 SP, France http://ioc.unesco.org - contact.phone: +33 (0)1 45 68 03 18

IOC Circular Letter No 2824 (Available in English)

IOC/VR/AA/pbo 4 January 2021



IOC/INF-1394
Paris, 4 January 2021
English only

Decision IOC-XXX/3.3.4 by IOC-30: IOCINDIO Chair to prepare, with the help of the IOC Secretariat, a proposal for changing the status of IOCINDIO that would contain the mission, the objectives, terms of references, budgetary implications, secretarial arrangements and other necessary provisions.

THE CASE FOR A NEW GOVERNANCE FOR IOCINDIO:
A PROPOSAL FOR CHANGING THE STATUS OF IOCINDIO IN A SUB-COMMISSION
OF IOC FOR THE INDIAN OCEAN

Online Consultation of IOC Member States: on 16 February 2021

Responsible: Mr Justin Ahanhanzo, IOC

Further elaboration: IOCINDIO-VIII, to take place before IOC-31

**Area? Impact on WESTPAC & IOCAFRICA? Interest of MS? Commitments?** 

#### Communication

- Team
- New website
- Newsletter
- Social media
- The World Oceans Day
- Communication by programmes
- Press (articles in leading magazines), TV
- **Generation Ocean**
- Goodwill Ambassadors
- Outreach, partnerships
- IOC branding within UNESCO

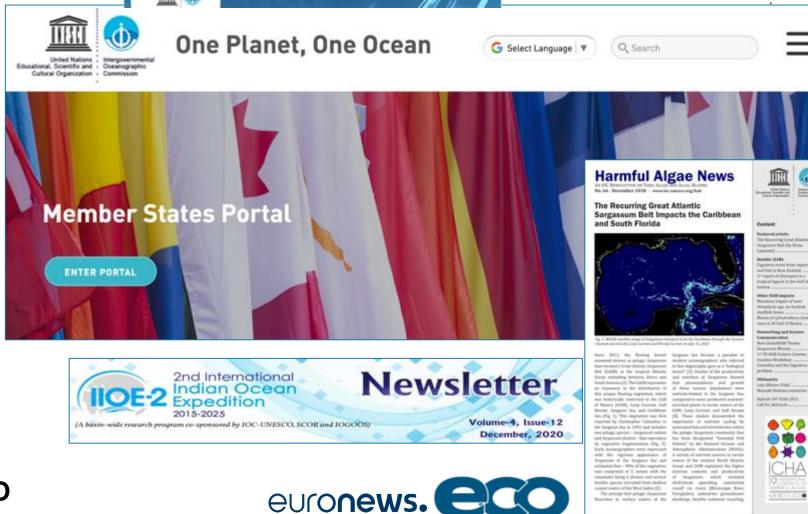






Educational, Scientific and . Oceanographic Cultural Organization . Commission

MINEST TOTAL



#### **Budget implementation 2018-2019**



- > Reference document IOC/EC-53/3.1(2) of 14 May 2020 Part I
- > Implemented according to adopted workplans total expenditure \$24.5M

#### **Budget Outline 2020-2021**

- > Reference document IOC/EC-53/3.1(2) of 14 May 2020 Part II
- ➤ Workplans developed consistent with Resolution XXX-3 and IOC-XXX/2 Annex 9 based on the appropriated regular programme budget of \$ 534.6M for UNESCO (US\$ 11M for IOC)
- > XB SECURED AT 31.12.2019 \$ 2.6M; XB GAP \$ 13.2M; TOTAL \$ 26.6M

XB Gap Filling overall on track but uneven among functions and mostly tightly earmarked, similar to 2018-2019

**COVID-19: expenditure rate at 30 June 2020 = 18% (UNESCO average) vs 25% linear rate** 

#### The Ocean We Want



A SUSTAINABLE OCEAN ECONOMY



Ocean We Want

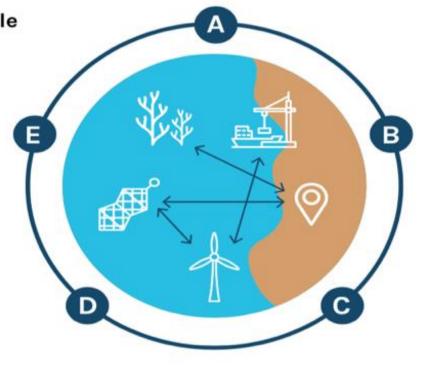
## Scientifically Sustainably Managed Ocean

WE COMMIT
to sustainably manage
100% of the ocean area

under national jurisdiction, by 2025.

Five cross-cutting enablers for a sustainable ocean economy

- A) Data reform
- B) Goal-oriented ocean planning
- **C)** Innovative finance and de-risking
- **D)** Stopping land-based pollution
- **E)** Upgrading ocean accounting



Five key sectors to be transformed towards a sustainable ocean economy



Sustainable ocean food production

**x6** 



Clean ocean energy

**x40** 



Low carbon transportation and ports

20%->1,5°



Ocean restoration and protection



Tourism

15T\$

## **Summary**



- Active, successful implementation of the Programme, despite Covid-19
- Explosive increase in outreach due to the online mode of work
- Leadership position, largely due to the Decade
- IOC or Decade? IOC and Decade?
- IOC is the smallest but one of most successful parts of UNESCO
- No way to increase the RP budget > no prospects for staff and hardship for program work. More output for the same price. But is it sustainable?
- IOC-31: presentation on healthy and optimal IOC
- We can save the ocean, we can start managing it sustainably, IOC may have a critical role in that development, but for that IOC has to have the resources. Do Member States want this?



#### True leadership/commitment by Chair and Officers,

#### hardest work by most of Secretariat

## **THANK YOU!**

