



unesco

Intergovernmental
Oceanographic
Commission



United Nations



Framework Convention on
Climate Change

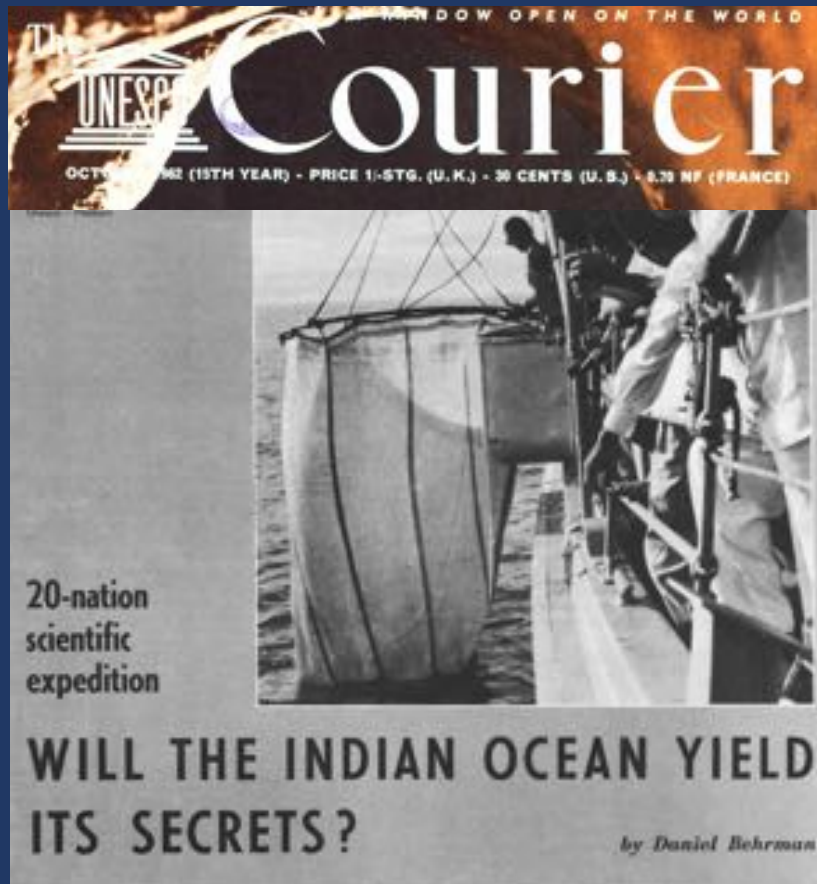
Subsidiary Body for Scientific and Technological Advice

Ocean and Climate Change Dialogue 2023

Dr Vladimir Ryabinin
Executive Secretary, IOC of UNESCO
Assistant Director General, UNESCO

Bonn, 13 June 2023

1960s



IOC Evolving Agenda

Now



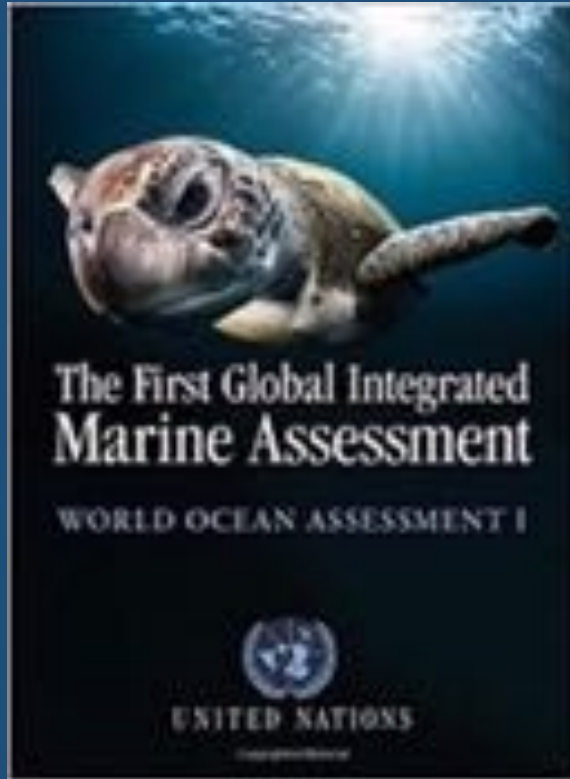
Intergovernmental UN platform
for dialogue and cooperation
in ocean science



Intergovernmental UN Platform to
enable ocean science for addressing
existential issues

2016

SDG14 of the 2030 Agenda



Humankind is running out of time to start managing the ocean sustainably





Commitment of 17 Panel Countries to sustainably manage 100% of EEZ by 2025



5 key sectors for transformation:

1. Food (x6)
2. Energy (x 40)
3. Low carbon transport & ports
4. Ocean restoration / protection
5. Tourism

- 20% of Carbon emissions gap
- GDP of **15 T\$** by 2050

5 “enablers” for:

“Sustainable Ocean Planning”

1. Stopping land-based pollution
 2. Innovative lower-risk finance
 3. **Upgrading ocean accounting**
 4. **Data + guidance (= science)**
 5. **Ocean planning**
- +
6. Climate change mitigation/adaptation

Key Ocean Management Domains



Coastal zone management and adaptation



Marine Spatial Planning/
Sustainable ocean economy



BBNJ, LMEs
MPAs, **ecosystem restoration**



Management of fisheries and aquaculture



Adaptation to and mitigation of climate change, NDCs



Development of national R&D strategies & ocean policies



Real-time oceanographic, weather/climate services



Regional and national capacity development



Early warning systems

Current IOC Portfolio

E: 2030 Agenda and SDG 14, UN, UNFCCC + Paris Agreement, UNCLOS, BBNJ, CBD, MSP, Sendai, Coastal zones,

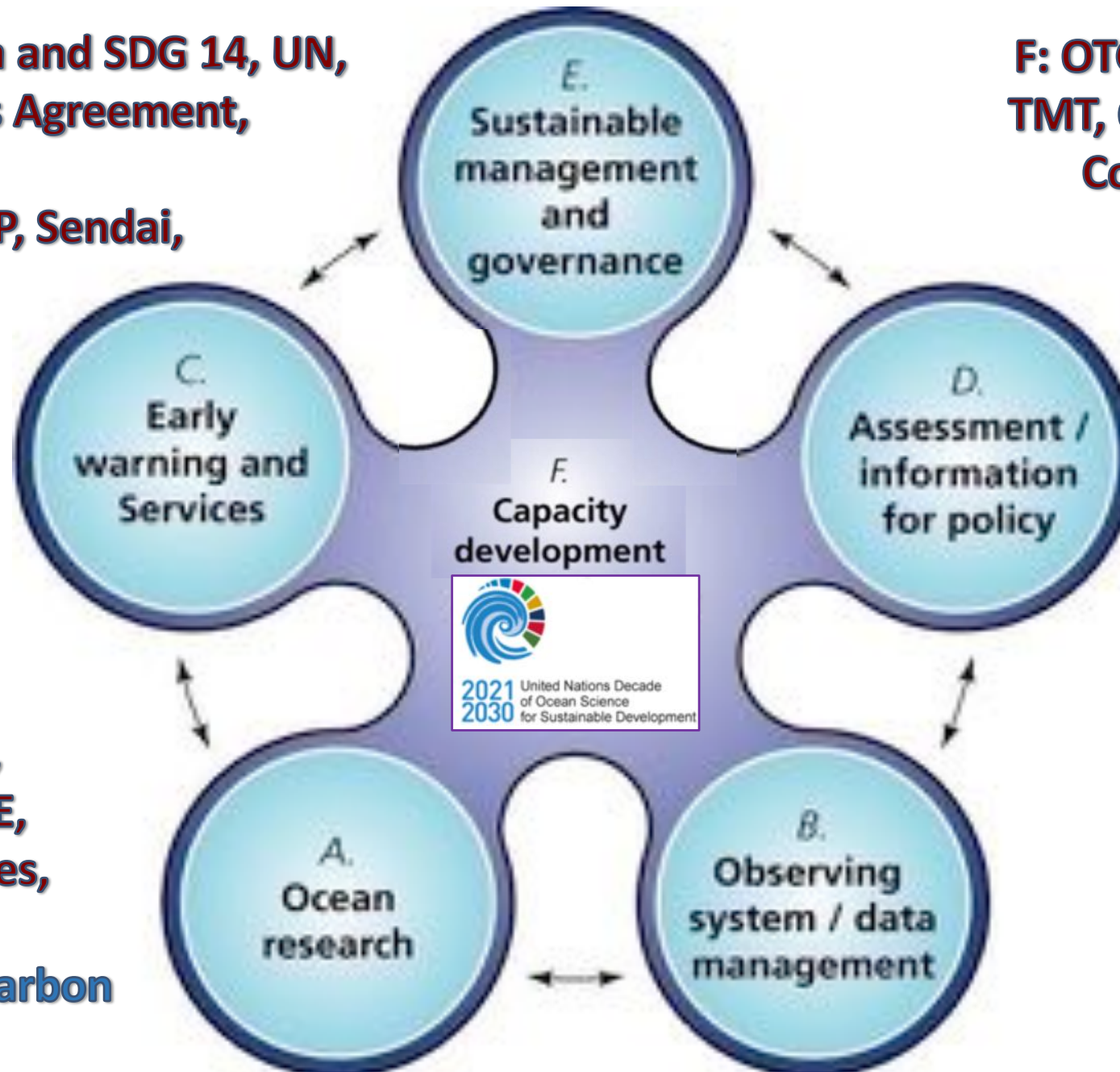
C: Tsunami, HABs, Ocean Prediction

A: GOSR, StOR, GOAON, GO₂NE, Long-term Series, WCRP, IIOE-2, Carbon, Blue Carbon

F: OTGA, RTRCs, CD, TMT, Ocean literacy, Communication, Education

D: IPCC, WOA3, SDG 14.3, SDG 14.a

B: GOOS, GLOSS, IODE, OBIS, GEBCO



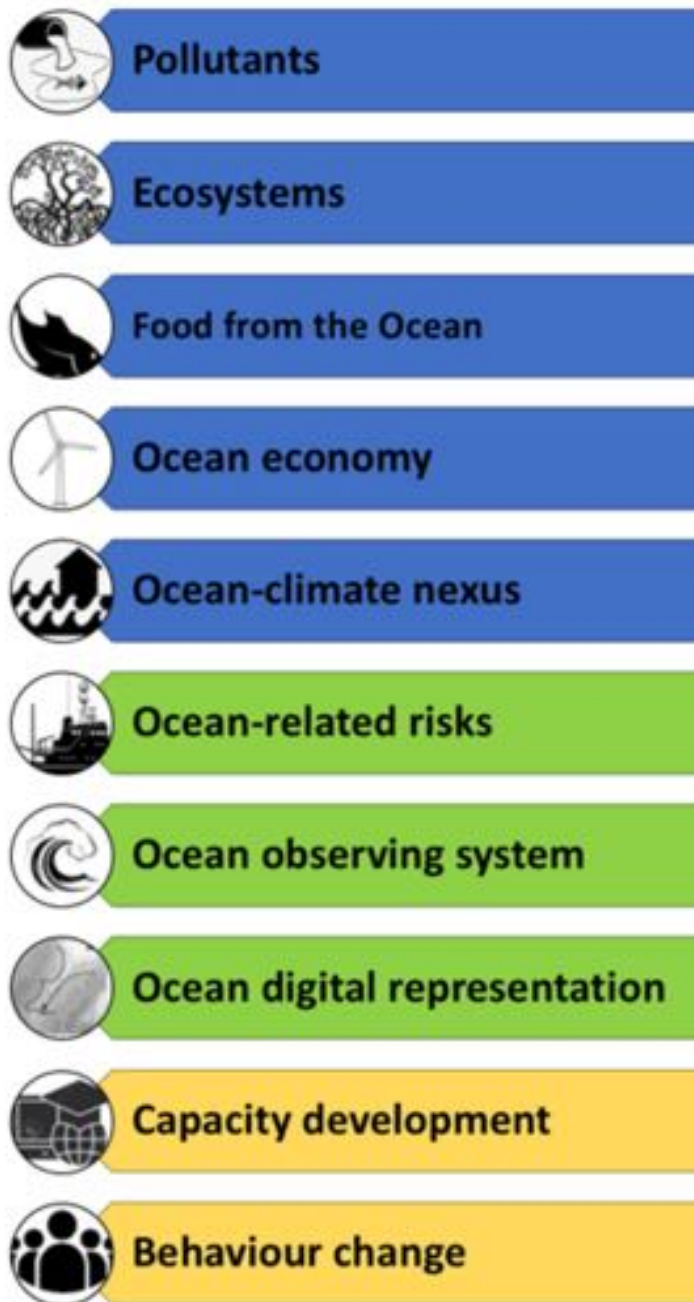


**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development

*The science we need
for the ocean we want*

- Clean
- Healthy and resilient
- Productive
- Predicted
- Safe
- Accessible
- Inspiring and engaging

OCEAN DECADE CHALLENGES



ENDORSED OCEAN DECADE ACTIONS



REGIONAL AND NATIONAL COORDINATION



ENGAGEMENT AND OUTREACH



IOC WORK ON BLUE CARBON

The Blue Carbon Initiative (BCI):

- Support scientific research on blue carbon
- Methods for assessing blue carbon stocks and emissions
- Provide policy guidance (e.g., NDCs guidance)

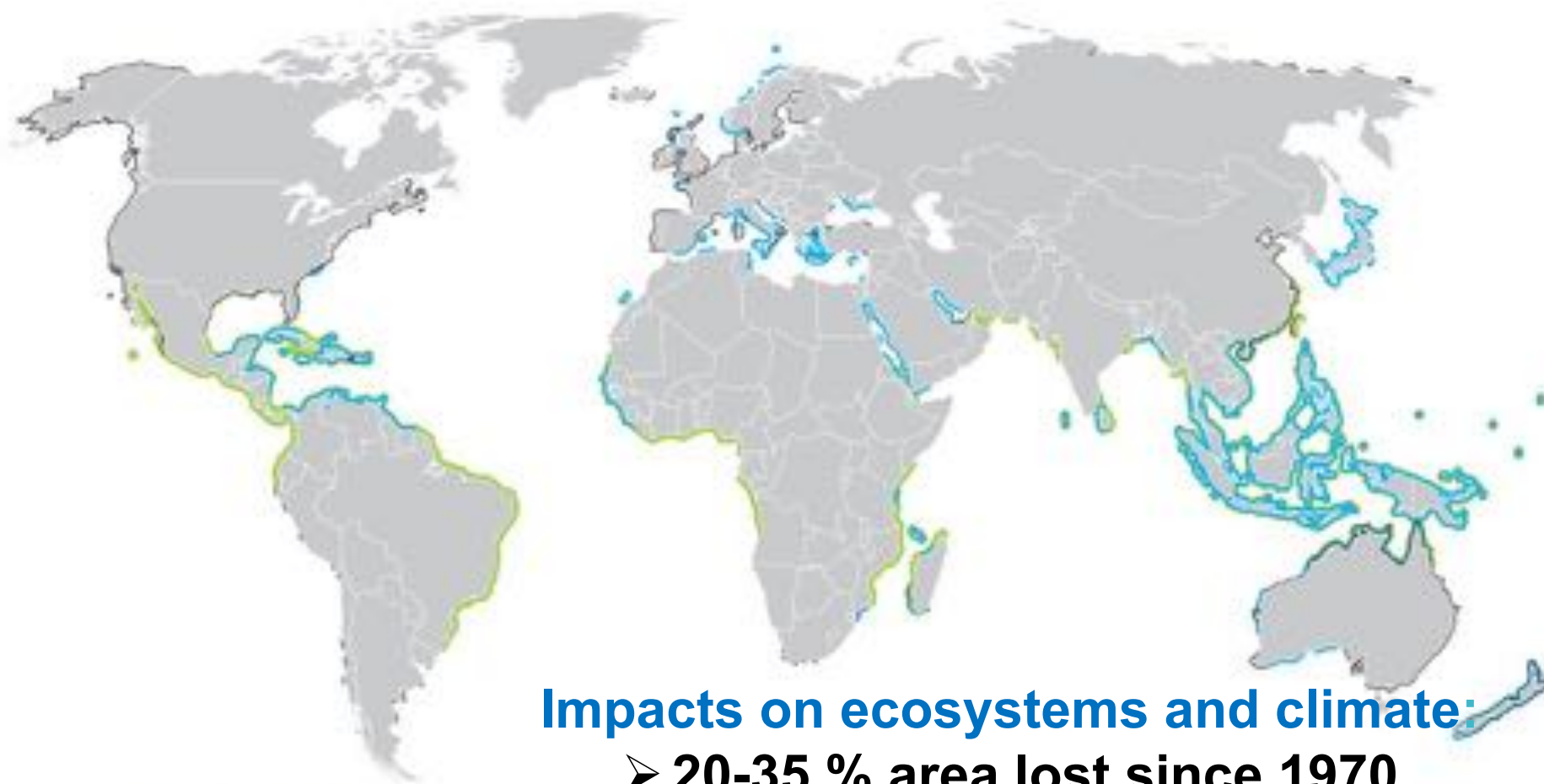
International Partnership for Blue Carbon (IPBC):

- 1) Increase international commitments to protect coastal blue carbon ecosystems
- 2) Improve national policies
- 3) Accelerate on-the-ground action (Blue Carbon Accelerator Fund)

Global Ocean Decade Programme for Blue Carbon (GO-BC):

- Enhance scientific cooperation at global/regional level
- Coordinate capacity building activities





■ Saltmarsh ■ Seagrass ■ Mangroves

Figure 1: overview of the global distribution of mangroves, saltmarshes and seagrasses (source: The United Nations Environment – World Conservation Monitoring Centre (UNEP-WCMC) datasets).

Impacts on ecosystems and climate:

- 20-35 % area lost since 1970
- Up to 92% of original C stocks can be released back
- 0.141-0.466 gigatons CO₂ per year could be avoided by preventing degradation of blue carbon ecosystems

Ocean in UN Frameworks

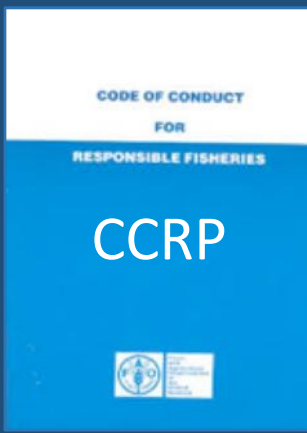


Kunming-Montreal GBF

Ocean-Climate Dialogue



+ ILBI on Plastic Pollution 2024



More Effective Approach to Ocean Issues in UN



Agencies,
Conventions,
Frameworks,
Protocols



Private Sector

Science
Community

Ocean Science -
Policy interface



For the 1st time in history this is feasible (+ more effective):

climate-smart, ecosystem-focussed, ethical & equitable
ocean management on the basis of science-supported
planning for a sustainable blue economy

(UN needs a *consolidated* approach, call it an SDG14 Plan)