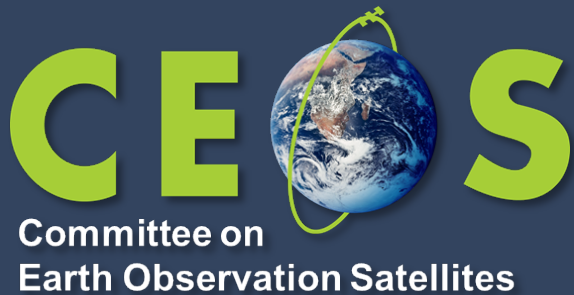


SIT Technical Workshop 2024

*UN Conference on the Ocean
Nice (FR), 9-13 June 2025*



Selma Cherchali, CNES
Agenda Item 9,7
SIT Technical Workshop 2024
Sydney, Australia
18th - 19th September 2024

- What is the « **UNOC conference series** »?
- **UNOC n°3 main goal and key objectives**
- the Setup of an International “**Ocean Space Alliance**”
to address UNOC objectives
 - **The IPOS & the Ocean Health Indicator**
 - **CEOS & UNOC3**
 - **Proposed Roadmap to UNOC3**

What is UNOC?



- The **United Nations Ocean Conference** series is dedicated to Support the Implementation of **Sustainable Development Goal 14**.
- The Conference aims to be the **game changer** that will reverse the decline in the health of our ocean for people, planet and prosperity. It will be **solutions -focused** with engagement from all.
- Previous UNOC conferences: UNOC1 (New York, June 2017), and UNOC2 (Lisbon, June 2022)
- In 2017, the UN General Assembly has launched the “**UN Decade of Ocean Science for Sustainable Development 2021 -2030**”
- To help achieve progress towards SDG 14, the Assembly in 2022 decided to **convene the high -level 2025 UNOC in Nice/France** in June.



UNOC3 main goal is to **Act towards the realization of SDG14** “*Conservation and sustainable use of the ocean, seas and marine resources*”, mainly through **three different objectives** :

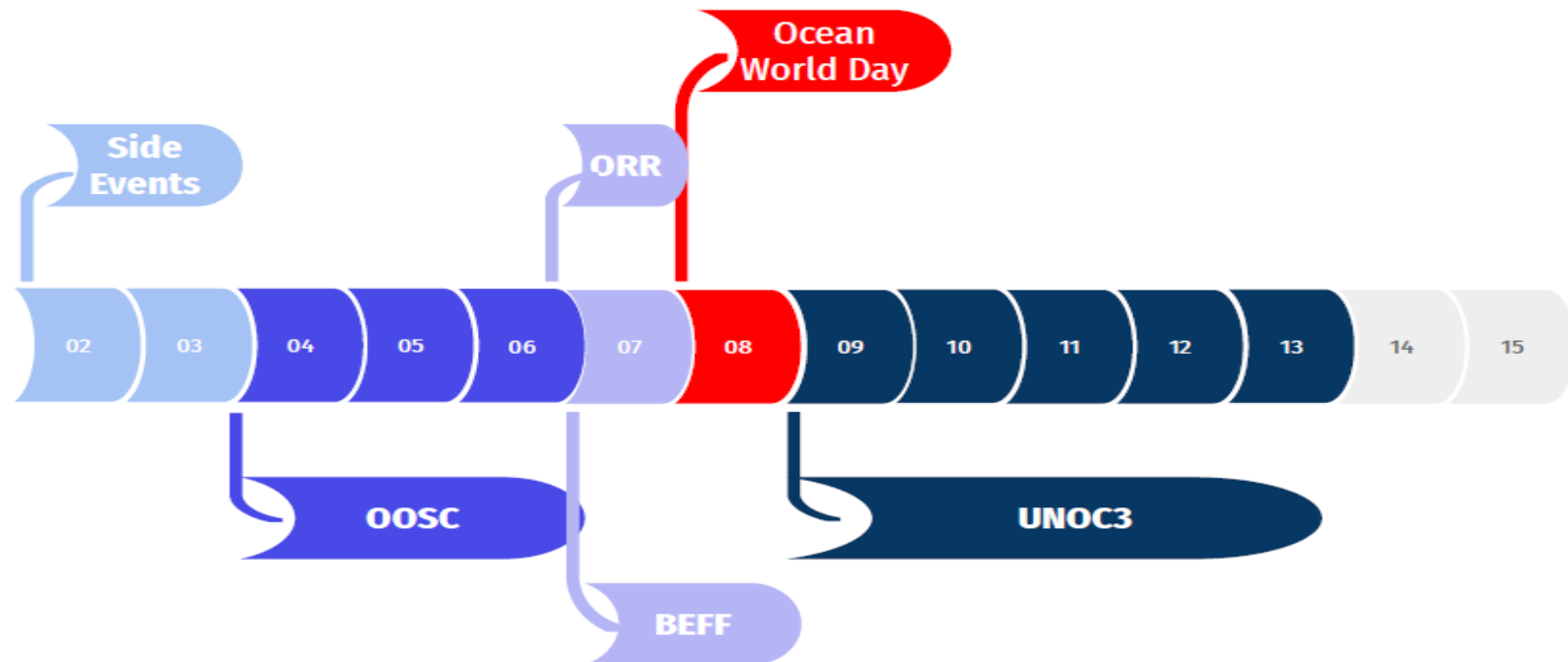
- To Elaborate an **action plan** of decisive, swift and unified efforts to address Ocean’s critical condition:
 - *Marine pollution,*
 - *Protection of marine and coastal ecosystems,*
 - *Reduction of ocean acidification,*
 - *End of illegal fishing and overfishing,*
 - *Increase in scientific knowledge related to ocean,*
 - *Respect of international law, etc...*
- To **Define an Ocean Health indicator** as proposed by **IPOS** (International Panel for Ocean Sustainable, initiated by CNRS, composed of 15 public marine research organisations)
- To **Acknowledge Mercator Ocean International** to evolve into an **Intergovernmental Organisation** to acquire, manage and propose marine data, products and services to international stakeholders



Organisation and Planning

Three side events are scheduled:

- The **One Ocean Science Congress (OOSC)**: organized by CNRS and IFREMER. (4-6 June);
- The **Blue Economy and Finance Forum (BEFF)** , hosted by the Principality of Monaco (7 June);
- a Summit of **Coastal Cities and Regions focusing on Ocean Rise & Resilience** (ORR), led by the city of Nice and the Ocean Climate platform (7-8 June):
- **UNOC 9-13 June**



Potential Role of CEOS in relation to UNOC3



UNOC3 key objective is to “**Act towards the realization of SDG14**” through:

- 1) the implementation of an **action plan** (dedicated to solve key urgent issues of **societal importance**) and
- 2) The definition of an **Ocean Health Indicator**.

In that context, CEOS has a **key role** to play **in providing/promoting EO data & derived knowledge information products** to address those objectives.

To collect “**Space**” expertise, ideas, knowledge and experiences and to promote them at an high political level, **a platform of exchange**, so called an “**Alliance**” (= **forum**), has to be set-up to act as a **key interface** with UNOC members and the UN General Assembly.

Potential Role of CEOS in relation to UNOC3: To support the launch of such an International Alliance of space agencies/organizations to act towards SDG14 targets/objectives.

This **Ocean Space Alliance** aims to:

- Act as a forum of discussion gathering key international space stakeholders (space agencies, CEOS representative, SCO PIs, governments representatives, UN programs' leaders...);
- Promote proven operational applications and services ;
- Consolidate and maintain an international “Space” multilateral dialogue on the long -term ;
- Act as the “Space” focal point in relation to UNOC : such Alliance will contribute to the elaboration of official UNOC declarations and recommendations;
- Organize a “Special Space Event ” at each UNOC conference;

Potential Role of CEOS in relation to UNOC3: **To support the launch of such an International Alliance of space agencies/organizations to act towards SDG14 targets/objectives.**

In particular, such UNOC “Special Space Event” will aim:

- To present the latest **“Space” scientific data and knowledge** which can bring a real added value in the design/development of future space missions & international research projects :
 - *New products* (e.g. ocean health indicators in cooperation with IP OS);
 - *New ocean/coastal monitoring systems;*
- To **communicate on the “Space toolkit”** (which encompasses services, products, applications, training opportunities etc.) dedicated to beneficiaries who do not have enough “space” resources (e.g. small island developing states/SIDS) and wish to implement operational monitoring programs on their coasts/regional seas (in cooperation with UN support such as UNOOSA, UNEP,FAO, UNDP etc.).
- To **collect end-users feedbacks** on existing EO space based products/services in order to potentially upgrade them and ideally to promote the development of new ones;

IPOS and the Ocean Health Indicator



IPOS = International Panel for Ocean Sustainability

→ Why an IPOS?

- The IPOS intends to address challenges by becoming the new gateway that (re)connects knowledge and decisions for a sustainable ocean;


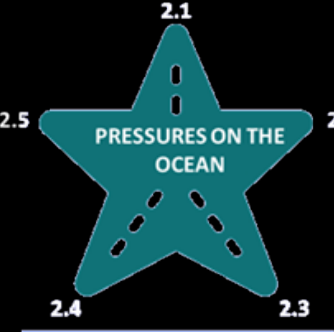
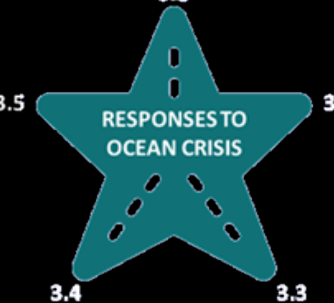
→ IPOS Governance

- The goal is for the IPOS to be established as a neutral independent entity under the UN umbrella ;
- The IPOS is to be **launched at UNOC June 2025** .

→ Ocean Indicators

- Major IPOS deliverables would be **Ocean indicators** describing:
i) the state of ocean health, ii) the associated pressures and iii) the foreseeable management measures
Each indicator will be made **of key variables** (temperature, biodiversity, SLR etc..)

KEY IPOS INDICATORS

	Key indicators	Operational indicators	Proven methodology	Existing target recognized internationally
Number of ocean boundaries crossed	 <p>STATE OF OCEAN HEALTH</p>	1.1 Ocean temperature	GTSP program of the IOC/UNESCO	To be developed/ derived from existing target
		1.2 Marine Biodiversity Index (MBI)	Marine Biodiversity Index	(Aichi Biodiversity Target 11)
		1.3 Average Sea Level Rise	Essential Ocean Variables	To be developed/ derived from existing target
		1.4 Sea-Ice extent	National Snow and Ice Data Center +EOV	To be developed/ derived from existing target
		1.5 Ocean acidity	GOA-ON program of the IOC/UNESCO	SRC - Planetary Boundaries
Evolution of pressures affecting the ocean ¹	 <p>PRESSURES ON THE OCEAN</p>	2.1 Climate change	UNFCCC	1.5°
		2.2 Pollution	Global Plastic Watch TBC	SDG 14.1
		2.3 Invasive species	To be developed	Aichi Target 9
		2.4 Overfishing	FAO	SDG 14.4
		2.5 Habitat destruction	Essential Climate Variable	Aichi Target 5 + SDG 14.2
% of actions implemented vs. commitments	 <p>RESPONSES TO OCEAN CRISIS</p>	3.1 Ocean protection	Marine Protection Atlas	30 x 30 + Aichi Biodiversity Target 11
		3.2 Sustainable management	Ocean Panel	100% of sustainably managed EEZ
		3.3 Literacy	To be developed	100% (not official target)
		3.4 Adaptation	To be developed	To be developed/ derived from existing target
		3.5 Funding	OECD (ODA)	\$100 billion pledge for climate action

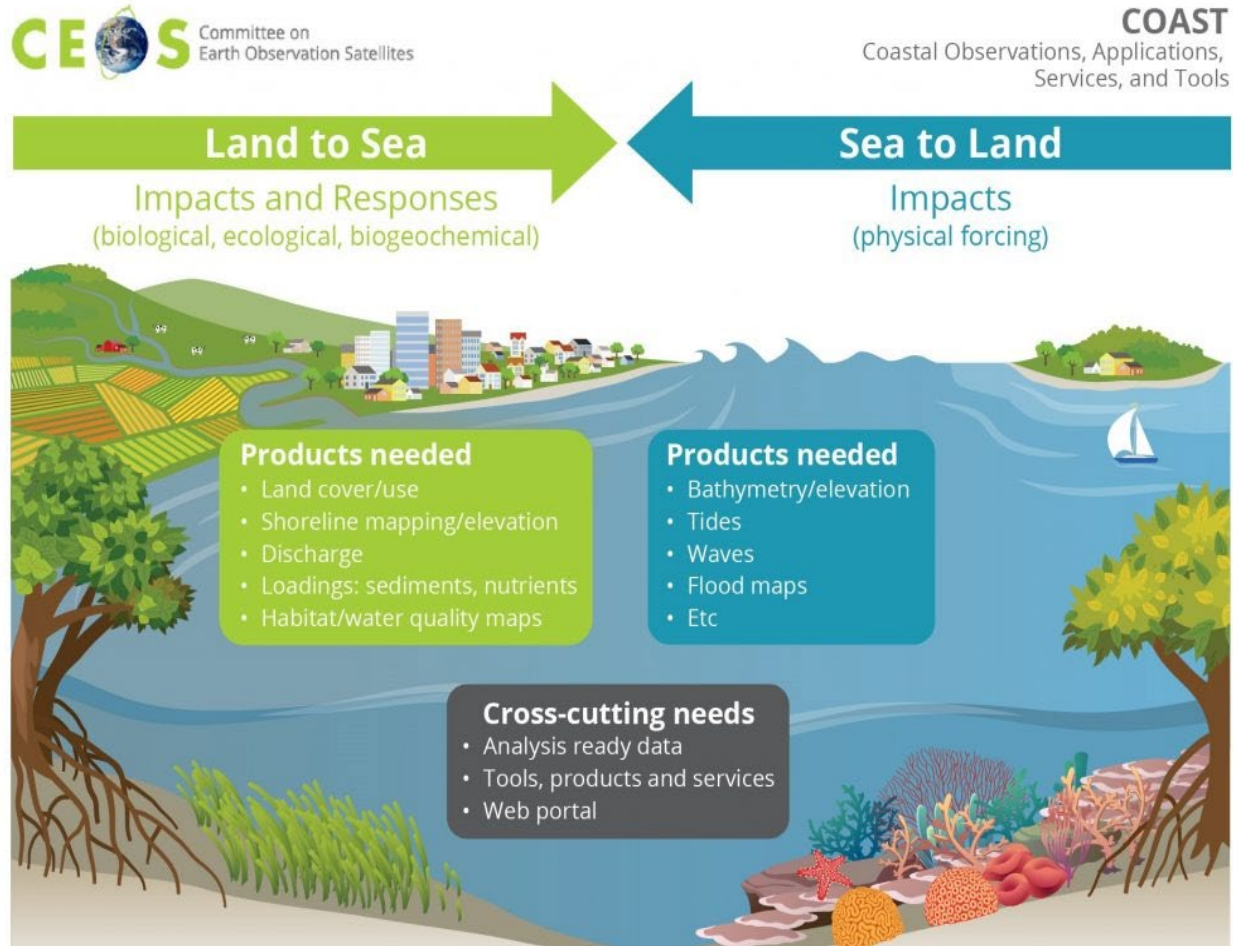
* SIDS : Small Island Developing States



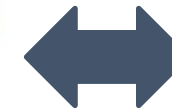
Brief reminder of CEOS COAST

- Since 2019, CEOS has formed a coastally focused team (**COAST**) to advance free, open source data to **better inform society of coastal issues** . In addition, CEOS COAST incorporates various Earth Observation data products.
- **CEOS COAST is engaging identified stakeholders:**
 - in the **co-design and testing of coastal products** ;
 - to **provide information they need** in the ways they want it delivered, and with a lowered barrier to data access.
- **Since 2021** , CEOS COAST is an **endorsed UN Ocean Decade Contribution** ;
- **Since April 2024** , COAST is a **cross-cutting Virtual Constellation (COAST-VC)** to help bridge land and aquatic observations within CEOS, and to continue the integration of multiple CEOS entities and domains, both thematic and technical (SST-VC, OST-VC, OCR-VC, LSI-VC, OSVW-VC, AC-VC, AFOLU, WG Disasters, Biodiversity etc.)
- **COAST-VC is currently led by NOAA, ISRO and CNES** .

Links between CEOS, the Ocean Space Alliance & IPOS



Synergies
with the Ocean Space Alliance objectives on
Marine & Coastal ecosystems
Marine Protected Areas
Marine Pollution
Fisheries management



Synergies
with IPOS “Ocean Health Indicator” on
Marine Biodiversity
Sea Level Rise
Ocean Acidification
Pollution Overfishing
Habitat destruction
Etc.

COAST is trans-parameter (parameter all ocean/water parameters)
COAST is trans-boundary (ocean + land + atmosphere + cryosphere)
COAST is trans-disciplinary (environmental + social science)

As soon as the Alliance is being setup,

- **CEOS is to be represented** → this is in coherence with the CEOS-COAST proposal to designate a CEOS representative for interactions with IOC, GOOS etc.
- **CEOS could work with IPOS** to develop the spatial contribution of Ocean Indicators, particularly the Health Indicator;
- **CEOS could propose key research products /services** useful for quick uses/uptakes for UNOC implementing actions ;

- **CEOS SIT TW**
 - September 17 Side event (1 hour) 2-3pm
 - Discussion & info exchange
 - September 19 10 min in AOB session
 - Discussion & info exchange
 - Official position from CEOS SIT : *preparation of a statement to be presented and endorsed at the CEOS Plenary in October.*
- **CNES side meeting at IAC in Milan** 15 October 2024 (1.30-3pm) enlarged to other stakeholders (e.g. UN entities): communication & exchanges on potential design of joint events (e.g. trainings)
- **CEOS Plenary in Canada**: 22-24 October 2024
 - *Endorsement of CEOS representation in the future UNOC/Ocean Space Alliance*
- **Dedicated “Ocean Space Alliance event”** to be held at UNOC 8 June 2025.