

# GEMS Ocean Newsletter N°2

## Featured Topics

- GEMS Ocean Current Activities
- GEMS Ocean Planned Activities
- GEMS Ocean Event Participation
- Partnerships
- Regional Engagements and Upcoming Events



Photo credit: Shutterstock/Ekaterina Kuzmenkova

Since its inception, the GEMS Ocean programme has been making significant progress in its mission to enhance the monitoring and observations of marine and coastal environments. This collaborative effort, backed by diverse stakeholders, international partners, and ocean experts, is dedicated to empowering various sectors of society to access, analyse, and utilize vital information concerning our precious ocean resources.

GEMS Ocean’s core partnership pool continues to grow, with the addition of new partners who share the Programme’s vision for a sustainable future of Oceans and Coast. The Programme is committed to achieving the UN Ocean Decade Goals, and charting a course toward innovative ocean and coastal management solutions that ensures a thriving and resilient future through collective efforts.

In this edition of the GEMS Ocean Newsletter, we highlight our team’s active participation in significant events, including the successful United Nations Geospatial Network Meeting held in Nairobi, Kenya and the GEO Blue Planet workshop held virtually, and focusing its theme on Ocean Observation and Prediction for Coastal Sustainability in Africa. These engagements have enabled the GEMS Ocean Programme to collaborate and network with stakeholders, paving way for concrete actions at the national, regional, and global scales. Leveraging advanced technologies and the World Environment Situation Room (WESR) platform, GEMS Ocean ensures that data, models, and analytics are presented in a user-friendly and easily interpretable format. By facilitating the accessibility of critical information, the Programme aims to drive actionable measures on the ground and foster scalable solutions regionally and globally. This data-driven approach aligns with UNEP’S Medium Term Strategy (MTS) for 2022-2025, focusing on combating biodiversity loss, addressing climate change, and tackling pollution.

The GEMS Ocean Programme focuses on two major challenges of the Ocean Decade, seven and eight to reverse the cycle of decline in

ocean health, find solutions for sustainable ocean management, and ensure the development of a sustainable blue economy.

- **Challenge 7:** Expand the Global Ocean Observing System for accessible, timely, and actionable data across all ocean basins to all users.
- **Challenge 8:** Create a digital representation of the Ocean for the development of a comprehensive digital representation of the ocean, including a dynamic ocean map that will provide free and open access for exploring past, present, and future ocean conditions in a manner relevant to diverse stakeholders.

The GEMS Ocean Programme is also aligned with Sustainable Development Goals (SDGs) 14 and 17 and aims to chart the advancement of ocean conservation and sustainable development initiatives on a regional and global scale.



-  **SDG 14:** “Life Below Water”- Focus on conserving and sustainably using marine resources, protecting marine ecosystems, and promoting responsible ocean management.
-  **SDG 17:** “Partnership for the goals”- Emphasizes the importance of global partnerships and cooperation to achieve all the SDGs, including mobilizing resources, knowledge-sharing, and technology transfer to support sustainable development.



Photo credit: Shutterstock/mbafai

## GEMS Ocean Current Activities

- Facilitate the integration of partners data catalogues within the World Environment Situation Room (WESR), IODE & MOI
- Working with the Cartagena Convention Secretariat and IOC-UNESCO (IOCARIBBE) on the development of the Digital Twin for the Caribbean prototype (CDTP)

## GEMS Ocean Planned Activities

- Co-development and world-wide integration of ocean prediction activities in collaboration with the decade endorsed actors and other stakeholders.
- Focus on early warning dissemination and communication.
- Ocean Observation, prediction and forecasting to support early warning for coastal sustainability in Africa.

## GEMS Ocean Event Participation

### UN Ocean Decade Ocean Prediction Collaborative Centre Kick Off Meeting | 11-12 January, Online

The kick-off meeting was hosted by Mercator Ocean International, a key partner of the GEMS Ocean and data hub on essential ocean variables. GEMS Ocean, as an officially endorsed programme of the UN Decade of Ocean Science for Sustainable Development, was a key participant of the Ocean Prediction meeting. The launch was hosted on a collaborative platform and centered on community building, connection of different sectors, and highlighting different operational ocean forecasting system around the world, UN Decade Programme and successful stories from the ocean forecasting communities.

### GEO Blue Planet Workshop "Ocean Observation and prediction for coastal sustainability in Africa" | 6 June 2023, Online

The GEO Blue Planet hosted a virtual workshop to address coastal sustainability in Africa through ocean observation and prediction. The workshop gathered 44 participants from 14 countries. The three-hour event aimed to foster collaboration and knowledge sharing among UN bodies, regional organizations, coastal stakeholders, and practitioners. Supported by the Coastal Geomorphological Changes Working Group, the workshop focused on Earth Observation (EO) based tools and solutions for monitoring coastal challenges. Various providers, including GEMS ocean, delivered flash presentations, and contributed to discussions regarding Earth Observation (EO). The workshop's insights will guide the actions of the working group, with a subsequent in-person event in Nairobi in January 2024 focusing on stakeholder needs for EO-based services, tools, and training to support coastal sustainability and resilience.

### ILIAD Webinar "Connecting Ocean digital twins using federated system approaches" | 7 June 2023, Online

The GEMS Ocean participated in the Iliad webinar focusing on the Iliad DTO project, which aims to connect digital twins of the ocean using a federated system approach. The webinar brought together experts from various organizations to discuss and share insights on this concept. The Iliad project, funded by the European Union aims to establish interoperable and data-intensive Digital Twin of the Oceans, building upon previous investments in blue economy infrastructures. As part of the consortium, GEMS Ocean actively contributed to the webinar and remains dedicated to advancing digital twin technologies in the oceanic domain. The webinar provided a platform for knowledge exchange, collaboration, and exploring innovative approaches for sustainable ocean management.

### United Nations Geospatial Network Meeting | 13-15 June 2023, Nairobi, Kenya

The conference and coordination meeting on "Building One UN Geospatial Situation Room for People, places, and planet", was hosted by UN Environment Programme in which GEMS Ocean participated. The event aimed to promote synergies and enable the United Nations System to effectively utilize geospatial information and data. The meeting finalized the first version of the "One UN Geospatial Situation Room" and completed the consultative process with the UN system.



Photo credit: Institution/Photographer



Photo credit: Institution/Parilov

### **Fujitsu Meeting on the GEMS Ocean Strategy titled “Oceanic Transformation - Embracing GEMS Ocean Strategy for a Successful Future” | 15 June 2023, *Online***

This engaging event provided valuable insights into protecting our oceans. The webinar delved into captivating topics such as the influence of marine animals tackling pollution, and harnessing cutting-edge technology developed by Fujitsu. Attendees had the opportunity to learn about innovative approaches and contribute to safeguarding the future of our precious oceans. The event featured Joana Akrofi (UNEP GEMS Ocean) who shared her expertise and highlighted the importance of acting for ocean conservation. The webinar was a significant step toward raising awareness and fostering a sustainable future.

### **MSP Global 2.0 Kick-Off Conference | September 2023, *Online***

The intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) and the Directorate General for Maritime Affairs and Fisheries of the European Commission (DG MARE) hosted the Online Kick-off Conference on MSP Global 2.0. The conference aimed to support sustainable marine and coastal ecosystem management through international marine/maritime spatial planning guidelines. The project initiative focused on “Supporting the global implementation of international marine/maritime spatial planning guidelines” aiming to make significant contribution to SDG 14 Target 14.2, such as sustainable management and protection of marine and coastal ecosystems through Marine Spatial Planning. The MSP Global 2.0 focused on implementation actions outlined in the Updated Joint Roadmap (MSP roadmap 2022-2027) to accelerate global Marine Spatial Planning processes. The project also focused on co-developing global tools alongside the MSP Global Guide and Focus on transboundary pilots in the Gulf of Guinea and Western Pacific Regions to strengthen MSP processes. GEMS Ocean actively participated in the conference, enhancing collaboration opportunities with stakeholders for effective marine spatial planning worldwide.

## **Partnerships**

The GEMS Ocean Programme has successfully formed partnerships with various institutions, experts, and the general audience since its inception. The core partnerships include the following institutions:

- UN Environment-GRID GENEVA
- GOOS
- G7
- Future Earth
- GRID ARENDAL
- Mercator Ocean
- World Resources Institute
- Regional Seas
- WCMC
- UNESCO- IOC

Beyond the core partnership is a second list of partners within the UN and beyond many who have expressed interest in the programme and look forward to engagement in the future working groups, acting as potential partners including, FUGRO, FUJITSU, HUB Ocean.



Photo credit: Institution/Photographer

## Regional Engagements and Upcoming Events

### Conference of Parties of the Cartagena Convention (COP) | 5-6 October 2023, Aruba



Photo credit: Shutterstock/Steve Photography

This year's COP 2023 in Aruba will bring together representatives from governments and organizations to address environmental challenges in the Caribbean and work towards protecting and developing its marine environment. The meeting will serve as a platform for knowledge sharing, collaborative discussions, and exchanging best practices among participants. Various side events, workshops, and technical sessions will focus on marine conservation, pollution reduction, sustainable fisheries management, and climate change adaptation in the region.

In the margins of COP 2023 GEMS Ocean will host a Data Hackathon to support the innovative initiative called the Caribbean Sea Digital Twin prototype (CSDTp).

The CSDTp aims to enhance our understanding of the region's coastal and ocean environment to inform policy making. The Data Hackathon will analyse and interpret data, identify critical environmental factors, and explore opportunities for developing the prototype. The results, along with capacity- building activities, will contribute to creating a digital twin prototype for monitoring and managing the region's coastal and marine ecosystems. Overall, the outcomes of the conference will significantly contribute to promoting the sustainable use and protection of the marine environment in the wider Caribbean region.

### 2nd UN Ocean Decade Regional & 11th WESTPAC International Marine Science Conferences | 22 -25 April 2024, Bangkok, Thailand

Hosted by the Government of Thailand and co-organized by the UNESCO/IOC Sub-Commission for the Western Pacific (WESTPAC), the 2<sup>nd</sup> UN Ocean Decade Regional Conference in conjunction with the WESTPAC International Marine Science Conference, will gather diverse stakeholders, including governments, research communities, private sectors, and NGOs, to represent ocean knowledge, assess achievements, identify priorities, and promote transformative ocean-based solutions in the Western Pacific region. Participants are invited to submit proposals for Scientific sessions, Decade Action Incubators, or Workshops, facilitating active involvement in addressing sustainability challenges like marine pollution, climate change, and biodiversity loss. This conference presents a vital opportunity for collaboration and tangible action towards a sustainable ocean future.

Learn more and submit your proposal at <https://ioc-westpac.org/event/imsc11>

### The UN Ocean Decade Conference | 10-12 April 2024, Barcelona, Spain

The conference will be hosted at the Barcelona International Convention Centre and will be part of an entire Ocean Decade week. Hosted by Spain and co-organized with UNESCO's Intergovernmental Oceanographic Commission IOC/UNESCO), this event will bring together the global Ocean Decade Community and partners to celebrate, evaluate progress, and set joint priorities for the future. The conference will also provide a forum to discuss the results of the Ocean Decade vision 2030 strategic ambition setting process around the Decade Challenges including critical issues such as climate change, sustainable ocean economy, pollution, biodiversity conservation, food security and natural hazards. The event will also create a new foundation to strengthen the sustainable management of the ocean and drive science-based innovation from global to local level. In the lead up to the Conference, will also have the opportunity to complement the official Conference programme through Satellite Events. Applications for Satellite Events closes on 30 October 2023.

---

#### Contact

[unep-ewad-gemsocan@un.org](mailto:unep-ewad-gemsocan@un.org)