

## The Global Environment Monitoring System for the Ocean and Coasts (GEMS OCEAN) Programme

The Global Environment Monitoring System for the Ocean and Coasts (GEMS Ocean) Programme is a dedicated multi-stakeholder coordinated mechanism convened by the United Nations Environment Programme (UNEP), co-designed with international partners and experts on Ocean and Coastal Monitoring and Observations. The Programme focuses in strengthening the capacity of all sectors of society to access, analyze, use, and communicate information to protect and sustainably use marine and coastal resources. This effort will especially feed global, regional and national processes such as Marine Spatial Planning (MSP), Ocean Forecasting and Sustainable Blue Economy Developments, to mention a few. The main aim of the Programme is to provide the world community with relevant data, information and capacity to find innovative ocean and coastal management solutions that can accelerate action on the ground and ultimately be scaled up regionally and globally. To achieve this goal, GEMS Ocean among others filters existing data on marine and coastal resources according to the three pillars of UNEP's Medium-Term Strategy (MTS) 2022-2025 – biodiversity loss, climate change and pollution - and leverages the World Environment Situation Room (WESR) platform and other relevant partner portals to display data, models and analytics in an easily interpretable form.

### Vision



A global environment monitoring system that provides relevant open and easily accessible ocean and coastal data, analysis, and information, guiding actions to protect and sustainably use marine and coastal resources.

### Mission



Co-design and convene a global Community of Practice across experts and society at large to provide capacity, analysis, innovation and synthesized information to decision and policy makers, civil society, international organisations as well as coastal communities worldwide in a holistic approach to keep the global ocean and coasts healthy and productive.

### Strategic Goals

- Promote and convene a transdisciplinary partnership approach focused on sustainable coastal and ocean use and ecosystem health.
- Strengthen capacity development on key aspects of ocean monitoring with a focus on Small Island Developing States (SIDS) and Developing countries.
- Provide access to the use of quality assured, interoperable, open environmental data, analysis and sets of indicators to governments, stakeholders and society at large.

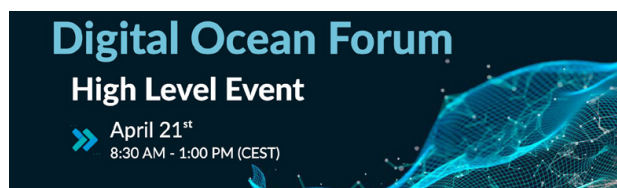
## GEMS Ocean Programme endorsed by the UN Ocean Decade of Ocean Science for Sustainable Development

The GEMS Ocean Programme and team, officially representing UNEP, are part of the Ocean Decade Data Coordination Group, which is the official appointed group of global experts that will help drive Ocean Decade actions on data, information and knowledge management. The Programme is also part of the UN Ocean Decade Collaborative Centre for Ocean Prediction (DCC-OP) to work on ocean forecasting at the regional level working collaboratively with the Regional Seas Programmes.

## Main events in which the GEMS Ocean Team participated

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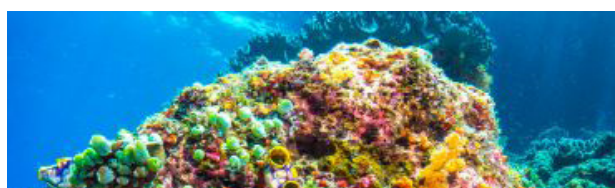
**Digital Ocean Forum**  
20-22 April 2022 | Paris, France



The main goal of the event focused on informing sustainable measures that ensure the preservation of marine environments, and to offer governments, researchers, businesses, activists, and citizens alike, the power to make informed decisions, backed by science and data, to restore marine and coastal habitats, support a sustainable blue economy and mitigate and adapt to climate change. The Digital Twin Ocean initiative was identified as a source of ocean knowledge and a new instrument for supporting Ocean policies implementation in almost real-time. GEMS Ocean through the convening mandate of UNEP engaged member states, experts and other institutions in making the current knowledge available downstream to support decision making for a healthy ocean and coasts.

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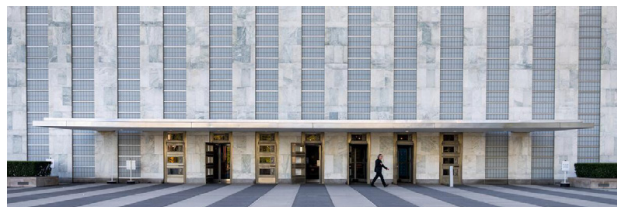
**The 22nd Global Meeting of the Regional Seas Programmes**  
25-28 May 2022 | Mahe, Seychelles



The event focused on the Regional Action Plan on Marine Litter and regional seas strategic directions 2022-2025, where member states endorsed several resolutions in relation to marine coastal environment. Moving forward to the next Strategic Directions, the GEMS Ocean Programme is willing to contribute on specific needs on marine litter monitoring such as technical assistance for developing harmonized national marine litter monitoring programmes but also support ongoing regional processes on Marine Spatial Planning (MSP) and Sustainable Blue Economy developments.

3

**Twenty-second meeting of the United Nations open ended informal consultative process on the oceans and Law of the Sea**  
6-10 June 2022 | New York, USA



The event focused its discussions on the theme "Ocean observing" and supported the prioritization of decision making in EEZs and beyond. The GEMS Ocean Programme made contributions and presentations on building a global ocean monitoring system for sustainable development through transdisciplinary partnership.

4

**UN Ocean Conference**  
26 June-1 July 2022 | Portugal, Lisbon



The conference, hosted by the governments of Kenya and Portugal, was centred towards the protection of the oceans, and mobilize action and propel much needed science-based innovative solutions aimed at starting a new chapter of global ocean action. The GEMS Ocean Programme was interactively involved in the Conference and coordinated a side-event focusing on supporting ocean and coastal observations and monitoring as scale and co-designing value from data to impact through a broader partnership approach.



5

**MSPMED Final Conference**  
13-14 October 2022 | Rome, Italy



The overall goal of the MSPMED project was to facilitate and favour the Maritime Spatial Planning implementation processes in the Mediterranean Sea, by supporting the establishment of coherent and coordinated plans across the Mediterranean marine regions and between Member States, in line with the EU MSP Directive objectives. The event was the closure of the Project and an occasion to network for future EU project proposals. The presentation on the GEMS Ocean Programme as a multi-stakeholder partnership approach was part of the third panel on “Accessible and Manageable Data for Maritime Spatial Planning” and fostered cooperation and coordination in advancing ocean observing and addressing the need for fit-for-purpose information and related challenges, with a specific focus on the Mediterranean Sea.

6

**GEO Blue Planet 5th Symposium**  
24-28 October 2022 | Accra, Ghana



The main objectives of the event were: initiate and stimulate dialogue about ocean and coastal related issues globally and in Africa, explore available tools and opportunities, and provide insights into the needs of local and regional stakeholders, which are essential to address marine and coastal issues. GEMS Ocean particularly contributed to the Ecosystem Conservation Session of the Symposium. The session focused on how properly conserved ecosystems and well managed coastal and ocean activities are the basis for Sustainable Blue Economies that support regional communities and livelihoods.

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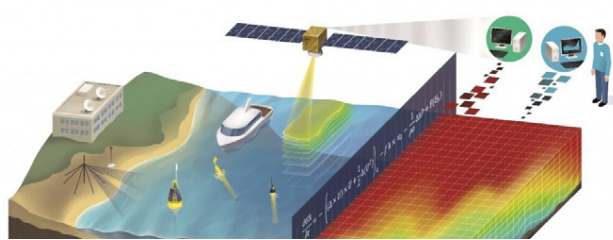
**3rd International Conference on Marine/ Maritime Spatial Planning**  
22-23 November 2022 | Barcelona, Spain



The conference aimed to follow up from the 2nd held on 15-17 March 2017 in Paris and to assess the state-of-the-art implementation of MSP and discuss challenges and opportunities to achieve the MSP roadmap priority areas and targets. The GEMS Ocean Programme was part of the session 3 of the Conference “Knowledge support for MSP” and fostered cooperation and coordination in advancing ocean observing.

8

**UN Ocean Decade Ocean Prediction Collaborative Centre kick-off meeting**  
11-12 January 2023 | 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 Ocean 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 centred on community building, connection of different sectors, and highlighting different operational ocean forecasting systems around the world, UN Decade Programmes and success stories from the ocean forecasting communities.



## Partnership

Since its inception, GEMS Ocean Programme has been able to establish and associate with different partners, experts and the general audience. The core-partnership currently includes the following institutions:

- G7 Future of the Seas and Oceans Initiative (FSOI)
- UNEP World Conservation Monitoring Center (WCMC)
- Mercator Ocean International (MOI)
- Intergovernmental Oceanographic Commission of UNESCO (IOC)
- Global Ocean Observing System (GOOS)
- Global Resource Information Databases (GRID) of Arendal and Geneva
- World Resources Institute (WRI)
- Future Earth
- Regional Seas Programmes

\*Beyond the core partnership is a second list of partners within the UN and beyond many of who have a expressed interest in the programme and looking forward to engagement in the future working groups.

## Regional Engagements and Upcoming Events

### Digital Twin for the Wider Caribbean Region

The concept and project proposal are a cooperation with the Cartagena Convention, the Government of Netherlands and Breda University of Applied Sciences (BUAs) and aims in implementing an Ocean and Coastal data Hackathon in the Wider Caribbean Region for the development of a DT in the Region. The ultimate goal is connecting existing data on the state of the Ocean, Coasts and Freshwater ecosystems in a Source-to-Sea fashion to provide information and knowledge to stakeholders and support decision-making processes to sustainably manage and improve climate resilience of coastal areas. This activity will be supported by capacity building/capacity development initiatives in the Region to provide local actors with the necessary tools to monitor, analyse and interpret data and information. If proven successful, the concept and approach will be replicated in other regions such as East Africa and East Asia.

### The 8th Our Ocean Conference

The event is scheduled to take place in Panama, on the 2-3 March 2023. Areas of focus and action include Climate change, Sustainable Fisheries, Sustainable blue economy, marine protected areas and maritime security and marine pollution. The GEMS Ocean Programme intends to participate in a hybrid side event focusing on the sustainable use of ocean, capacity development, and provision of accessible and interpretable data.

### The 2nd International Ocean Data Conference

The event will take place in Paris, on the 20-21 March 2023. The goal of the conference is to allow for the presentation of new challenges and opportunities in the area of oceanographic data and information management and exchange.

### The 2nd UN Water Conference

The event is scheduled to take place at UN Headquarters in New York, 22-23 March 2023. The conference will focus on the Midterm Comprehensive Review of the implementation of the objectives of the International Decade for Action, 'Water for Sustainable Development', 2018-2028.

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