



G7 SCIENCE & TECHNOLOGY 2024

Conference on Mediterranean and Atlantic Ocean Health and Coastal Resilience

A strategic initiative for the Mediterranean at the crossroad with the Atlantic

In the frame of the EU Mission Restore our Ocean and Waters by 2030

Location: Bologna, Technopole Cineca building (Stalingrado street n. 98, Access Pavillion 6)

Date: July 11, 2024

ABSTRACT

This high-level conference, jointly organized by the Italian Ministry of Universities and Research and the European Commission, will take place at the Bologna Technopole on July 11, in the frame of the G7 Science and Technology 2024. The event will address the **Mediterranean macro-region and Atlantic Ocean's health and coastal resilience towards climate related extreme events**.

The conference will showcase the progress made in monitoring, restoring and regenerating the ocean, seas and coastal areas, transitioning from research and innovation to local deployment, also through the development of the Digital Twin of the Ocean. It will highlight the international efforts, measures and innovative solutions aimed at regenerating marine biodiversity and ecosystems, enhancing climate mitigation and adaptation at the climate-ocean nexus, and increasing the resilience of coastal communities to severe weather events, such as storms and hurricanes, along with ice-melting and sea-level rise. Additionally, the conference will explore the resilience and security of water systems at the land-sea interface during climate change related extreme events, such as droughts and floods.

The event will feature strategic mobilization initiatives involving G7 countries, with particular focus on the EU Mission 'Restore our Ocean and Waters by 2030', the Sustainable Blue Economy Partnership (SBEP), the All-Atlantic Ocean Research and Innovation Alliance, and the Partnership for Research and Innovation in the Mediterranean Area (PRIMA). It will also link to international organizations and R&I initiatives, such as the Union for the Mediterranean and UN Decade of Ocean Sciences.

The Mediterranean Sea covers only 1% of the total ocean surface, but it accounts for about 20% of the global Gross Marine Product, as it hosts 30% of global sea-borne trade, 450 ports and terminals, the world's second-largest market for cruise ships, half of the EU's fishing fleet and over 150 million tourists during the summer period, also attracted by its 400 UNESCO sites and 265 protected areas of the basin.

However, also due to such intensive economical activities, the Mediterranean basin is facing relevant environmental challenges associated with pollution (e.g., from microplastics and pesticides) and climate change. Thus, joint actions among bordering countries and basins are needed to address these challenges, including preventing and eliminating pollution, restoring and regenerating local marine and freshwater ecosystems, biodiversity and coastal communities, and making the local blue economy more carbon-neutral and circular. Moreover, building resilience to extreme events related to climate-ocean and sea-level rise is becoming an urgent priority. It is crucial to implement effective solutions and prevention measures through basin tailored research and innovation, citizen engagement and investments in blue economy initiatives. The European Digital Twin Ocean and its integration with

biodiversity monitoring data and socio-economical models can facilitate a more tailored and effective approach to addressing those priorities. The EU Mission “Restore our Ocean and waters by 2030” is implementing concrete and integrated solutions to address such challenges by reshaping the role of research and innovation while promoting new forms of governance and collaboration, as well as citizen engagement. Noteworthy ongoing projects funded by the Mission and other EU R&I initiatives (e.g., SBEP, PRIMA) are already tackling the aforementioned challenges through basin tailored advanced monitoring, pollution prevention and reduction, and restoration and regeneration of marine and freshwater ecosystems and biodiversity.

This high-level G7 conference aims to present to the G7 Science and Technology delegations conveyed in Bologna, as well as Ministerial delegations from Mediterranean countries, the major outcomes of these initiatives and R&I portfolios that provide solutions and measures for the restoration of seas and ocean, along with the protection of coastal communities. Specifically, the event will address three relevant fields of action in the G7 Science and Technology track: i) R&I initiatives to promote the restoration and regeneration of marine ecosystems and their biodiversity; ii) Digital Twins and emerging technologies for advanced ocean ecosystem monitoring and assessment; iii) cooperation with low- and middle- income countries, especially Africa.

The event will welcome stakeholders from the Mediterranean basin, international and sea basin intergovernmental organizations as well as representatives from regions, cities, ports, islands, shipping, industries, academia, education, NGOs, citizens and youth.

DRAFT PROGRAM

10.30 – 11.00	Registration
11.00 – 12.45	Visit to the Bologna Technopole Welcome by: <ul style="list-style-type: none">• Florence Rabier, Director General ECMWF• Francesco Ubertini, President of CINECA Visit to the European Centre for Medium-Range Weather Forecasts (ECMWF)
12.45 – 14.00	Light lunch
14.00 – 14.30	Welcome <ul style="list-style-type: none">• Stefano Bonaccini, President of Emilia Romagna Region (TBC)• Anna Maria Bernini, Italian Minister of University and Research• Iliana Ivanova, European Commissioner for Innovation, Research, Culture, Education and Youth
14.30 – 14.40	Keynote Pascal Lamy , Chair Mission Board ‘Restore our Ocean and Waters by 2030’
14.40 – 15.15	Ceremony: Endorsement of the Mission Charter by Italy <ul style="list-style-type: none">• Anna Maria Bernini, Italian Minister of University and Research

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- **Gilberto Pichetto Fratin**, Italian Minister of Environment and Energy Security

After the ceremony, statements by other invited Ministers:

- **Sylvie Retailleau**, Minister of Higher Education and Research (France)
- **Abdellatif Miraoui**, Minister of Higher Education, Scientific Research and Innovation (Morocco)
- **Mohammed Belhocine**, Commissioner for Education, Science, Technology and Innovation, African Union
- **Armin Reinartz**, Director-General “European and International cooperation in Education and Research (Germany)
- **Gideon Henderson**, Director General for Science and Analysis and Defra Chief Scientific Adviser (United Kingdom)
- **Kei Koizumi** Principal Deputy Director for Science, Society, and Policy (USA)
- **Mona Nemer**, Chief Science Advisor (Canada)

15.15 – 15.45 **Break**

SESSION 1: EU leading actions on the restoration, reduction of pollution, monitoring and resilience of the Mediterranean Sea and the Atlantic Ocean

15.45 – 16.45 **Mission “Restore our Ocean and Waters by 2030”**

Key note speaker: John Bell, Director Healthy Planet and Deputy Mission Manager, DG Research and Innovation, European Commission

- **Fedra Francocci**, BlueMissionMed - Mediterranean Lighthouse: projects portfolio on pollution and resilience
- **Ana Lillebø**, AA-AGORA – Atlantic and Arctic Innovation action: projects portfolio on restoration and resilience
- **Pierre Bahurel**, Mercator Ocean, FR – The EU Digital Twin of the Ocean
- **Morena Diazzi**, DG Emilia Romagna, IT – Synergies with Regional funds

Q&A

SESSION 2: International projects and initiatives from the Mediterranean to the Atlantic

16.45 – 17.30 **All Atlantic Ocean Research and Innovation Alliance**

- **Arran McPherson**, Fisheries and Oceans Canada (DFO)
- **Daniele Iudicone**, Stazione Zoologica Anton Dohrn

Sustainable Blue Economy Partnership

- **Margherita Cappelletto**, Ministry of University and Research, IT - SBEP projects portfolio on coastal resilience

Partnership for Research and Innovation in the Mediterranean

- **Angelo Riccaboni**, Co-Chair PRIMA

Blue Investments

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- **Felipe Ortega Schlingmann**, Head of Bioeconomy division, Environment & Natural Resources Department Project Directorate, European Investment Bank

Q&A

WRAP-UP SESSION AND CONCLUSIONS

17.30 – 17.45

The way forward – conclusions

Elisabetta Balzi, Head of unit healthy oceans, DG RTD, Oceans, Seas and Waters unit, European Commission