REPORT

SCINMEET LAUNCH EVENT

'The Science We Need for the Mediterranean Sea We Want'

12-13 July 2022 | Rome (Italy)

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INTRODUCTION AND GENERAL OVERVIEW

The present report outlines the main results of the launch event of the "Science We Need for the Mediterranean Sea We Want" Programme (SciNMeet), hosted by the Italian Oceanographic Commission (COI) in a hybrid modality in Rome at National Research Council (CNR) on the 11th-12th of July 2022, and co-organized the United Nations Environment Programme/Mediterranean Action Plan (UNEP/MAP), the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) and the General Fisheries Commission for the Mediterranean (GFCM/FAO) in collaboration with the BlueMed Initiative.

The SciNMeet Programme is an Action of the United Nations Decade of Ocean Science for Sustainable Development 2021-2030 (hereafter Ocean Decade) and addresses major Mediterranean challenges and gaps in scientific knowledge with the aim to better understand and manage impacts of climate change, pollution, overexploitation of resources, and marine hazards on the marine environment to contribute to maintenance of ecosystems' functioning and the sustainability of relevant economic operations as well as preventing biodiversity loss. Increasing education, awareness and international collaboration, by mobilizing the scientific community, policy-makers, private sector and society at large. Based on these objectives, the Programme addresses the Ocean Decade's seven outcomes and will contribute to the implementation of the Agenda 2030. Following a preliminary assessment of the available capacities, the objective of the UN-Decade Programme is to turn the Mediterranean area into a "model region" where the challenge of strengthening the science-policy-society interface towards reversing the cycle of decline of the Mediterranean marine environment is fully tackled. This effort will explicitly point to the interconnections of pollution, climate and hazard risk issues with the sustainability of the blue economy proving the effectiveness of long-term synergies and cooperation.

Supported by a tailored governance system, seven technical Task Teams are working together to address thematic and cross-cutting lines of actions such as Climate Change, Marine Pollution, Marine Hazard, Ocean Literacy & Education, Ocean Observing & Prediction, Data Sharing, and Knowledge Transfer/Capacity Building, by engaging the broad community of stakeholders, according to the principle of co-design and in line with the principles outlined in the Ocean Decade Implementation Plan. In doing so, the SciNMeet system will constantly bring its outputs and contribution to major R&I and science-to-policy frameworks.

During the launch event the introductory plenary session was followed by operational parallel meetings of the Task Teams, addressing contents and rationale, Terms of Reference and roadmap for the smooth running of the activities. Besides giving a general overview on the event and plenary session, that mark a substantial milestone to start-up the activities of the Programme, this report provides also a brief insight on the work carried out by the seven Task Teams.

OBJECTIVES OF THE LAUNCH EVENT

The overall process toward the submission of the ScinMeet Programme started in the 2019 as results of the two regional consultations addressed to the Mediterranean Region; Table 1 provides an overview of the main steps.

Following the endorsement by the IOC-UNESCO in 2021, the UN-Decade SciNMeet Programme needed to be presented to the scientific community operating in the Mediterranean region and relevant stakeholders. The open launch event entailed technical and strategic objectives, including:

1. Marking a substantial milestone to start-up the activities:
    a. Initiating the process to structure the governance system
    b. Activating the technical work of the Task Teams.

2. Connecting and bringing contribution to major Research & Innovation (R&I) and science-to-policy frameworks. In this regard key interventions were addressed by the European Commission on the Europe Mission 'Restore our ocean and waters by 2030'; by UNEP/MAP on science-policy in the Mediterranean. by IOC-UNESCO on contributions to Ocean Decade and the Ecosystem Approach; by GFCM on their 2030 Strategy and the science underpinning efficient fisheries management towards sustainable fisheries in the Mediterranean; by the INTERREG-MED Programme Secretariat on years of cooperation opportunities in the Mediterranean Region.

3. Starting engaging the broad community of stakeholders that will further contribute to the activities according to the principle of co-design.

	2017	2018	2019	2020	2021	2022
United Nation proclaims the Decade of Ocean Science for Sustainable Development 2021-2030						
Launch of the Ocean Decade roadmap						
Official Proposal of Italy as organizer of the Regional workshop for the Med						
Setting-up of the Steering Committee for the Med regional workshop						
Iterative definition of the outline and the Agenda						
UN Ocean Decade Regional workshop (Venice)						
Co-design workshop (virtual)						
White paper "The Mediterranean Sea we want"						
SciNMeet proposal submission & endorsement						
Interim Steering Committee management						
SciNMeet launch event						
Set up of the Secretariat and operationalization of Task Teams						

Table 1 – Overview of the Mediterranean Decade Programme - Gantt chart

FACTS AND FIGURES

Context (address, dates, organizers):

- Venue: CNR, Rome, Italy
- Dates: 11-12 July 2022
- Co-organisers: Italian Oceanographic Commission (COI), Intergovernmental Oceanographic Commission (UNESCO/IOC), United Nations Environment/Mediterranean Action Plan (UNEP/MAP), General Fisheries Commission for the Mediterranean (GFCM/FAO).

Workshop key figures and highlights:

Figure 1 – Geographical representation: continents.

Number of participants: 110.

Geographical representation: 4 continents, 20 countries.

Specific keywords: Ocean Decade, Mediterranean Sea, Sustainable Development Goals, marine science, co-design.

Agenda: Annex 1.

Website: https://www.cnr.it/it/nota-stampa/e-17999/commissione-oceanografica-italiana-il-12-luglio-l-evento-di-lancio-di-scinmeet

UNVEILING THE LOGO

During the morning session of the second day of the launch event, it was unveiled the official logo for SciNMeet, which was created by graphic designer Elisa Abbadessa. The logo was chosen as the winning design in a graphic competition organized by the Italian Oceanographic Commission (COI), and was selected for its ability to convey the program's key objectives.

Figure 2 – Logo of the SciNMeet Programme

The design of the logo is based on the idea that SciNmeet will follow three different paths to achieve its main goals:

1. To bridge the scientific community, the private sector and society at large.
2. To generate data and products.
3. To address new policy requirements and societal demands.

The logo itself is composed of three wavy lines, which represent the waves of the Mediterranean Sea. These waves meet at different points, creating two shapes that resemble a pair of eyes, symbolizing the importance of looking to the future of the Mediterranean Sea.

The logo will represent the program in all official documents and communication tools, and will be used for future editions of the program as well.

KEY OUTCOMES

The launch event confirmed the importance of cooperation between Science & Policy is crucial for the Mediterranean region to address the sustainable development goals and to contribute to the UN-Decade challenges. Long term implementation of the SciNMeet Programme will surely highlight the biodiversity component presently included in all Thematic Tasks. Collaboration and alignment with National Decade Committee activities acting in the Mediterranean is central for success of the Programme. SciNMeet should identify activities/projects/actions on the Mediterranean Sea to and can be a case study as examples for other regions and aim at adding value to existing research work. To this aim an effort should be made to mobilize scientific actors and organizations for the entire Mediterranean. The SciNMeet Programme has the potential and aims to become a solid science-policy interface for the Mediterranean Sea.

TASK TEAM 1: CLIMATE CHANGE

Facilitators/Rapporteurs: Andrea Storto (CNR Ismar).
Participants: 10.
Chair: Manuel Hidalgo (IEO).
Co-chair(s): Maria Cristina Mangano (SZN).
Participants: Andrea Storto (CNR), Manuel Hidalgo (IEO), Gabriel Jordà (IEO, UIB), Maria Snoussi (BlueMed Initiative, MedECC), Barak Herut (IOLR), Francesca Spagnuolo (PCC), Mohamed Ibrahim (BUE), Haris Paliogiannis (MIO-ECSDE), Marco Zavatarelli (UniBO).

1. RATIONALE

Achieving the stated General Objectives of enhancing cooperation opportunities and forming optimal partnerships, as well as co-designing and co-producing solutions to the challenges facing the Mediterranean Sea, is of crucial importance for the future of the region. These objectives can be achieved through the elaboration of a shared regional strategic roadmap for the Mediterranean Decade and beyond. Additionally, the generation of dedicated research and innovation is necessary to tackle the degradation of marine ecosystems and biodiversity.

To achieve the General Objectives, the following Specific Objectives must be addressed. First, it is essential to keep the marine space under permanent review through periodical monitoring and reporting on the status of the Mediterranean Sea space, marine ecosystems, and biodiversity. This will provide stakeholders with a reliable quantitative set of indicators and analysis tools to contribute to the Ocean State Report and the Integrated Monitoring and Assessment Indicators. Secondly, it is crucial to develop improved models and prediction capacities of the Mediterranean Sea. This will allow stakeholders to anticipate future trends, develop adaptive strategies to address them, and make more informed decisions regarding the management and protection of the Mediterranean Sea.

2. BASELINE

During the launch event, the discussion focused on few specific aspects:

1) Identification of knowledge gaps.

   The team has sketched the knowledge gaps, identifying three inter-connected types of gaps:

   - Knowledge gaps in the drivers/stressors of climate change;
   - Knowledge gaps in the effects of climate change in the Mediterranean Sea;
   - Knowledge gaps in the synergy and interaction between the physical, biological, and human spheres. In order to specifically identify the main gaps from the three categories, the team has also identified significant overlaps with other task teams, in particular: Marine Pollution (e.g. impact of climate change on the ocean's health);

Marine Hazards (e.g. extreme events); Observation and predictions (e.g. regional predictability across different scales, “observability” of climate signals, etc.).

2) Survey of other paste, current, and future projects to capitalize their outcomes in the framework of SciNMeet activities.

   The task team has prepared an initial list of activities and projects, external to SciNMeet, which are synergistic and overlapping with the Task Team 1 (TT1) activities. It is desirable, in the future, to strengthen the link, at different levels, with such projects. In particular, TT1 identified several categories of activities, listed briefly as:

   - Copernicus Services.
   - Coordinated activities (e.g. MedCLIVAR, MedCordex).
   - ESA activities and projects.
   - UN Decade projects with overlapping goals (e.g. CoastPredict).
   - Associations, e.g. those concerned with biodiversity (e.g. GFCM 2030 Strategy).
   - Monitoring tools and databases (e.g. for alien species).
   - Horizon Europe projects.
   - Interreg projects.
   - Various.

3. ACTION POINTS

- Extend the TT membership to include:
  - Expertise on climate change financial aspects and assessment of mitigation and adaptation policies.
  - Experimental biology and link with climate change.
  - Representative from assessment agencies (e.g. JRC).
- Reconvene after the summer break to finalize the membership and in the meanwhile identify the co-chairs.
- Update consensus on principal knowledge gaps.
- Revise and possibly complement the list of projects/initiatives.

TASK TEAM 2: MARINE POLLUTION

Facilitators/Rapporteurs: Christina Zeri (HCMR)
Participants: 10
Chair: to be defined
Co-chair: pending
Participants: Fedra Francocci (CNR), Francois Galgani (IFREMER), Christos Ioakeimidis (UNEP/MAP), Jelena Knezevic (UNEP/MAP), Marina Lipizer (OGS), Patricija Mozetic (NIB), Mario Sprovieri (CNR IAS), Jacek Tronczynski (IFREMER), Thomie Vlachogianni (MIO-ECSDE), Christina Zeri (HCMR).

1. RATIONALE

The Mediterranean Sea and its marine ecosystems face key challenges related to the growing anthropogenic pressures/stressors (biodiversity losses, climate change impacts, overfishing, and chemical pollution). The Mediterranean Sea is recognized as particularly vulnerable to chemical pollution including legacy and emerging chemicals, micro-and nano-plastics. This is related to the long history of Europe's industrialization, high coastal urbanization and tourism, in combination with the specific geomorphology and oceanographic characteristics of the basin. Apart from numerous coastal hot-spot areas, several sea-based activities such as shipping, aquaculture, offshore activities (e.g., oil and gas exploration and extraction), dredging and dumping of sediments, further contribute to the contamination of the basin. Despite the scientific evidence acquired so far on mapping and assessing pollution status of the Mediterranean ecosystems, we know very little for newly produced synthetic chemicals which are leaking to the environment. Moreover, the effects of the long-lasting exposure of the Mediterranean ecosystems to chemical mixtures are still not clearly understood. There is growing evidence that chemical pollution can alter development, reproduction, behavior, survival and mortality rates of individual species and populations. The presence of plastics & microplastics is known to alter contaminants' transport modes through adsorption /desorption mechanisms and to affect the biogeography of species through colonization. Nevertheless, a clear link between the contaminants' status and alterations on the biodiversity in field conditions, has not been established. On the regional scale a major drawback for a comprehensive understanding of pollution status stems from differences in monitoring and analytical capabilities among bordering countries. There is a need for a shared exploitation of new technological /scientific developments in monitoring and in understanding contaminants' fate and effects. To that end a dialogue should be established within the broader marine scientific community, (e.g. marine scientists dealing with pollution, biodiversity, toxicology, marine technology developers), towards a shared common vision for a clean, healthy and resilient Mediterranean Sea.

2. BASELINE

The overall objective of Task Team 2 (TT2) is to enhance our understanding on contaminant (legacy and emerging, plastics) presence in the Mediterranean, on their major sources and their impacts on biodiversity taking advantage of novel scientific techniques. New tools and solutions for shared and harmonized monitoring /observation schemes will be promoted with the ultimate goal to support EU (WFD/MSFD) and non-EU (UNEP/MAP) policies and promote feasible solutions.

In line with the goals of the SciNMeet Programme, the work within Task Team 2 will be oriented towards contributing to the following objectives:

- Enhancing cooperation opportunities towards optimal partnerships by elaborating a shared regional strategic roadmap for the Mediterranean Decade and beyond
- Promoting the co-design and co-production of solutions to the problems
- Keeping the marine space under 'permanent review' (surveillance)
- Narrowing the gaps between the North and South Mediterranean shores reinforcing partnerships and transboundary cooperation and contributing to reduce inequalities

Previous and ongoing initiatives and projects will be valorized, and specific scientific priorities will be set in regard to marine pollution issues. Based on new scientific developments and technological solutions, TT2 will work on identifying the most feasible and promising ones in order to plan the way forward. Several topics have been addressed, among them the effects of pollution on biodiversity taking advantage of biomarkers, meta-genomics and meta-transcriptomics techniques; the interaction of plastics with contaminants; the mapping/monitoring of emerging contaminants. The low spatial coverage of contaminants monitoring of the Mediterranean basin and the 'secret' contamination of the deep sea have been highlighted. Along these lines, TT2 will provide a strategic road map to support and align the monitoring of the marine environment under the EU Directives (WFD/MSFD) and UNEP/MAP IMAP Programme.

On the science-policy-society interface, links will be established with relevant groups (e.g. UfM working groups; EU-MSFD TG; Barcelona Convention working groups) for a continuous exchange of information and delineation of priorities. Since the final goal is the 'Clean, Healthy and Resilient Mediterranean' the co-design and adoption of solutions for minimizing chemicals and plastics leakage to the environment is of utmost importance. TT2 will seek links with targeted stakeholders via relevant ongoing projects (e.g. PREP4Blue, BlueMissionMed LightHouse, BlueMED) to open a dialogue towards a common understanding of needs and feasible solutions. Furthermore, TT2 plans to support knowledge transferring via targeted capacity building activities/workshops.

3 ACTION POINTS

- Identify the sources of knowledge in the field of marine pollution (incl. contaminants, marine litter and micro-nano-plastics), explore specific aspects not addressed so far. Updating the mapping of pollution hotspot areas in the Mediterranean. Map ongoing efforts on monitoring harmonization and identify bottlenecks.
- More members to be invited covering a wider geographical range and expertise, including technology developers and decision makers. Identify key persons to join the group from non-EU countries.
- Explore financial instruments and possibilities (e.g. Public-Public partnership; Smart specialization strategies; Interreg; World Bank; H2020 (to influence the 3rd call).
- Links with the other TTs are crucial in particular with TT4 Ocean literacy & education; TT5 Ocean Observing & prediction; TT6 Data sharing; TT7 Knowledge transfer/capacity building. Sharing the SH list

TASK TEAM 3: MARINE HAZARDS

Facilitators/Rapporteurs: **Angela Pomaro** (CNR Ismar)
Participants: 6.
Chair: to be defined.
Co-chair(s): to be defined.
Participants: Angela Pomaro (CNR), Stefano Lorito (INGV), Denis Chang (NEAMTWS), Gerog Umgiesser (CNR, COI), Tarek El Geziry (NIOF), George Zodiatis (University of Cyprus, MONGOOS), Ivica Vilibic (Institut Ruđer Bošković, MONGOOS)

1. RATIONALE

High impact coastal hazards can devastate whole regions and result in high casualties. Enhancing the integrated approach is therefore needed to better monitor and understand the effects of pollution, climate change and marine hazards on the Mediterranean ecosystems and the goods and services they provide and hence on human population, its health, safety, and socio-economic activities, by exploiting, integrating, and improving existing knowledge and observation capacities.

Therefore, adaptive, prevention and mitigation strategies shall be proposed.

The SciNMeet Programme aims at turning the Mediterranean area into a “model region” with the challenge of strengthening the science-policy-society interface delivering evidence-based solutions to decision-makers and promoting the co-design and co-production of solutions towards environmental protection and sustainable development.

This can be achieved by deploying transdisciplinary science, including socio-ecological, research and innovation, expertise of actors belonging to the sea/maritime industry, citizen science and taking into account societal needs.

Fostering the generation of dedicated research and innovation also to contribute to marine pollution/hazards (including harmful algal blooms) alert and management and to improve preparedness to emergencies, supporting plans for prevention, adaptation and mitigation to pollution, extreme events (such as tsunamis, or storm surges) and climate change in the Region thus reducing the coastal risks, safeguarding population and activities at Sea.

2. BASELINE

Marine Hazards cover physical, biological and geological aspects.

Moreover, it is connected to the concept of risk, hence preparedness and response management, which is strongly dependent on social, cultural and political aspects, showing a strong diversity in the Mediterranean Region: level of maturity, information availability, technological and knowledge gaps, impacts and costs, etc.

Finally, each marine hazard is characterized by peculiar space and time distribution both in terms of the impact, and related management, as well as in terms of the possible solution.

Cascade and speed up effects due to marine hazards interaction / simultaneous occurrence and / or long-term trends (i.e. climate change) add to their severity.

Points of strength of this working group is its strong transdisciplinary, direct science to policy contribution and strong connection with other TTs, while the bottlenecks may be different for each marine hazard both in space and time scales, due to the different level of maturity for each marine hazard.

3. ACTION POINTS

During the discussion the following recommendations and resolutions have been identified:

- Ensure covering all marine hazards (working on UN definitions) to be tackled within the TT: HABs; Tsunamis/Earthquakes; Storm surges/sea level rise/extreme waves/floods; Oil spills; (Coastal erosion/landslides); (Bradisism/subsidence).
- Finalize the TT experts list, while taking into consideration diversity in terms of geographical representation.
- Ideally we would like to involve 3 (+2 back-up) experts for each hazard. In particular, Georgios Sylaios (Democritus University of Thrace) has been identified as an expert contributor for the coastal erosion topic.
- Include representatives from different countries response agencies.
- Design a common frame for the description of each hazard, in terms of: definition; risks assessment and impacts; costs of the impacts; predictability and forecasting systems; knowledge gaps; technological gaps; maturity level of management (here we find a strong connection with TT5 Ocean Observing and Prediction); datasets: which and geographical coverage (here we find a strong connection with TT5 Ocean Observing and Prediction & TT6 Data Sharing); sub-categories, if any (i.e. HABs); cascading effects connected to other hazards; preparedness and response/communication (here we find a strong connection with TT4 Ocean Literacy & Education - mainly about hazards definition/awareness); timescales (hazards occurrence and response time); bottlenecks, challenges and related possible time frame for solutions (and possible to achieve in 2-years time frame, if any).
- Map geographical coverage for the MED area of the initiatives enlisted in Table 2 of the operational plan, relevant for our TT and possibly update the initiatives list.
- Decide the key objective to address for the upcoming 2 years: understanding the hazard and related risk; reduce the impact; improve prediction; mitigate the risk or prioritize the hazards at geographical scale (here we find a strong connection with MSP activities).
- Promote publication of position papers/special issues/review papers/regional overviews, etc.
- Official invitation and nomination with the UN Ocean Decade.

TASK TEAM 4: OCEAN LITERACY & EDUCATION

Facilitators/Rapporteurs: **Francesca Santoro** (IOC-UNESCO), **Alessandro Gibertini** (CNR Ismar).
Participants: 13.
Chair: Francesca Santoro (IOC-UNESCO).
Co-Chair: Michael Scoullos (MIO-ECSDE).
Participants: Francesca Santoro (IOC-UNESCO), Michael Scoullos (MIO-ECSDE), Alessandro Gibertini (CNR Ismar), Melita Mokos (EMSEA/University of Zadar), Dina Eparkhina (EuroGOOS), Vesna Flander-Putrle (NIB), Valeria Bottalico (TBA21), Giulia Realdon (EMSEA), Yolanda Koulouri (EUROGOOS/EMSEA), Athanasios Mogias (EMSEA/University of Thrace), Joanne Foden (UNEP-MAP), Mita Drius (Libera Università di Bolzano), Laura Khatib (Guardians of the Blue).

1 RATIONALE

The Task Team 4 (TT4)'s objective is to work towards a Mediterranean Sea literate society by focusing on blue education in all its forms - formal, non-formal, and informal. To achieve this, the group aims to make use of existing projects and initiatives while identifying areas for innovation. These areas include exploring links with the blue economy and blue careers, and improving the inclusion of all Mediterranean countries.

A critical aspect of this work is to ensure Diversity, Equity, and Inclusion (DEI) within blue education initiatives. The group recognizes that DEI must be at the forefront of any effort to promote ocean literacy and education. To accomplish this, the group will prioritize collaboration with organizations and initiatives that are committed to DEI in the blue economy and related fields.

Ultimately, the goal of the group is to promote a comprehensive understanding of the Mediterranean Sea and its importance for the region's cultural, economic, and environmental well-being. This includes understanding the complex relationships between human activities and the marine environment, as well as the interconnectedness of different regions and communities within the Mediterranean. By fostering a Mediterranean Sea literate society, the group hopes to promote sustainable practices that will contribute to the preservation of this vital resource for generations to come.

2 BASELINE

The Mediterranean region has shown great interest in Ocean Literacy (OL), which is the understanding of the ocean's influence on our lives and our influence on the ocean. One of the strengths in this area is the existence of the Mediterranean Sea Literacy framework. This framework provides guidance on OL practices that are relevant to the region, helping to promote collaboration among countries and organizations.

However, there are also some bottlenecks that need to be addressed. One such bottleneck is the lack of funding for OL initiatives in the Mediterranean. This makes it difficult for organizations and

individuals to carry out OL programs and activities. Another bottleneck is the lack of participation from all countries in the region. While some countries are actively involved in promoting OL, others are not, which can lead to unequal access to OL resources and opportunities.

Another challenge is the lack of OL resources in Mediterranean languages. This hinders the dissemination of OL knowledge among the general public, as many people in the region may not be fluent in English, the predominant language used for OL materials.

In the Mediterranean region there are other existing ocean literacy projects and initiatives related to OL initiatives.

One such project is EU4Ocean, which is a European Union initiative that aims to foster ocean literacy among European citizens, especially youth. Further initiatives promoting marine education across Europe were launched by the European Marine Science Educators Association (EMSEA), which promotes marine education across Europe also through regional groups, such as the EMSEA Med that developed a Mediterranean Sea Literacy Guide, already translated in Greek, Italian, Croatian and Slovenian (and coming soon in other Mediterranean countries' languages). There are also projects that focus on OL in schools such as the network ”Blue Schools, component of the EU4Ocean Coalition, which provides educational resources for schools to teach students about the ocean and its importance. Additionally, OL is often integrated into larger educational frameworks, such as Education for Sustainable Development (ESD) and UNESCO sites.

Finally, there are several OL working groups, such as the Ocean Literacy Working Group of the European Global Ocean Observing System (OL EuroGOOS), which focuses on developing and implementing OL initiatives in the European region. By connecting and collaborating with these projects, OL initiatives in the Mediterranean can leverage existing resources and expertise to promote OL more effectively in the region.

3 ACTION POINTS

Following actions have been identified:

- Develop a stock-take template.
- Develop ways of communicating internally and externally.
- Identify gaps.
- Identify areas of innovation.
- Develop concept notes for fundraising.

TASK TEAM 5: OCEAN OBSERVING & PREDICTION

Facilitators/Rapporteurs: Katrin Schroeder (CNR-ISMAR).
Participants: 17.
Chair: Aldo Drago (MCAST).
Co-Chair: Karim Hilmi (MONGOOS).
Participants: Vanessa Cardin (MONGOOS), Emma Heslop (UNESCO/IOC), Roberta Guerra (UNIBO), Carmen Garcia Martinez (IEO), Marie-Helene Rio (ESA), Katrin Schroeder (CNR Ismar, COI), Enrique Alvarez Fanjul (Mercator Ocean International), Joaquin Tintorè (SOCIB), Nadia Pinardi (UNIBO, CoastPredict), Cherif Sammari (INSTM), Emanuele Clementi (MONGOOS), George Pethiakis (HCMR), Jelena Knezevic (UNEP/MAP), Suzan M. El-Gharabawy (UNESCO/IOC Africa), Laurent Coppola (MONGOOS), Aldo Drago (MCAST), Karim Hilmi (MONGOOS).

1. RATIONALE

We can revise to do better what we do today without reinventing the wheel and by making sure that we capitalize on what already exists - cit. Aldo Drago.

Task Team 5 (TT5) is a cross-cutting activity of SciNMeet.

The target outcomes of TT5 focus on the co-design of a shared trans-national ocean observing system of systems, covering a consolidated and extended range of parameters, data and derived products by exploiting the synergy of in situ and space observations to

- Support Essential Ocean Variables (EOVs), long term and sustained observations, re-analysis and forecasting services to be delivered as a Mediterranean contribution to the GOOS.
- Provide a reliable quantitative set of indicators and analysis tools to contribute to the Ocean State Report, the Integrated Monitoring and Assessment Indicators (IMAP), and the Mediterranean Sustainability Dashboard datasets.
- Integrate and iteratively support numerical modeling to improve prediction capacities of the Mediterranean Sea.

The observing system will need to rely on agreed governance structures that seamlessly link national to regional scale efforts, serving a knowledge-based society, providing the services needed by stakeholders and responsible entities, and supporting the sustainable blue economy in the Mediterranean.

The TT5's objectives are to ensure systematic observations and continuity of data records in north and south of the Mediterranean Sea, extending the range of observations to include biological and ecological EOVs also in the coastal areas, to adopt numerical models which serve to extrapolate observations in both space and time at the resolution required to understand the marine ecosystem dynamics and biogeochemistry, to provide an integrated, long-term observing

and modeling capacity, and to synergize national initiatives in favor of a joint trans-national observing system that fulfills the routine assessment on the state of marine environment, provides the data services needed by stakeholders and users, keeping the sustainable use of marine resources under permanent review while providing reliable data as a resource for the evolving marine-based economic activities and excellence in the region.

2. BASELINE

There are many points of strengths that have been identified. The most important one is that the group is ready, committed and able to capitalize on what is already existing in the Mediterranean Sea in terms of Ocean Observations and Prediction. In fact, MONGOOS is strongly involved, and many countries from north and south are represented.

Figure 3 – Words cloud built by TT5 members at the Launch Event: keywords concern the scope of TT5.

During the launch event, bottlenecks that could hinder the TT5 action were discussed. The most important and persistent one is the sustainability of funding to maintain the Mediterranean Observing and Prediction System, for which there are severe sustainability issues regarding in situ observations. This is especially evident when considering that 73% of meteorological observations are funded purely by institutional funds, while for the ocean this is only 28%. The rest are national or international research or other funds, and this implies a high degree of uncertainty and time limitation. There is also a high degree of fragmentation, lack of coordination, and observations mostly rely on ad hoc and unsustain projects. Furthermore, presently there is no real shared and agreed design, which implies overlapping and duplication issues, as well as a general waste of resources. The community is also characterized by high levels of competition (within and across countries) and a lack of coordination, as well as a strong capacity imbalance. In general, coordination and basin-scale integration is difficult, particularly across-disciplines, but also for

geopolitical reasons. Also communication with the wide range of regional policy stakeholders is difficult.

There are several links to other projects that were identified as well as potential contributions to relevant frameworks, such as MONGOOS, ESA, CoastPredict, MERCATOR, UNEP/MAP, IOC, and in particular through the ShareMed Framework Document that this TT will inherit as a legacy.

3. ACTION POINTS

Build together rather than try to combine what we do separately - cit. Aldo Drago.

The future action points that were identified are the following:

- Ensure sustainability of funding.
- Regular mapping of user requirements (identify pan-regional Mediterranean priorities for ocean observations and predictions):
    - Cost-benefit analysis
    - National and international commitments
    - Free and open exchange of data
    - Seek political commitment
- Involve different authorities to demonstrate the benefit of the sustainability of ocean observations (e.g. publication or website on the "Benefits of a sustained Mediterranean Sea Observing and Prediction System"?).
- Improve visibility and effectiveness of the Mediterranean ocean observing and prediction networks and services (e.g. user specific targeted products).
- Promote transfer of technology and expertise following a TNA on demand approach experimented in SHAREMED, or issuing specific calls such as within the Marie Curie Postdoctoral Fellowships and similar opportunities.
- Find common strong and focused objective/s that overarches all Task Teams ("do one good action together").
- Contribute to JCOMM observing systems (Joint WMO-IOC Commission for Oceanography and Marine Meteorology).
- Strengthen relationships with other WMO programs (contributing to the international planning and implementation of the Global Ocean Observing System).
- Better liaising with other IOC bodies and in particular IOC-AFRICA and Africa GOOS.
- Provide a set of quantitative indicators to contribute to the Ocean State Report.
- Effective coordination to respond to EU calls.

TASK TEAM 6: DATA SHARING

Facilitators/ Rapporteurs: **Alessandra Giorgetti** (OGS).
Participants: 18.
Chair: Arthur Pasquale (INFO-RAC, ISPRA).
Co-chair(s): to be defined.
Participants: Jelena Knezevic (UNEP/MAP), Peter Pissierssens (UNESCO/IOC), Mustafa Yucel (METU, BlueMED), Stefano Moncada (UM), Mario Dogliani (SDG4MED), Christos Ioakeimidis (UNEP/MAP), Branko Čermlej (NIB), Volodymyr Myroshnychenko (METU IMS), Vera Noon (ACTEON), Kate Larkin (EMODNET), Diego Alvarez (IEO-CSIC, MONGOOS), Lorenza Babbini (INFO-RAC, ISPRA), Annalisa Minelli (INFO-RAC, ISPRA), Muriel Lux (Mercator Ocean International, Copernicus), Marie-Helene Rio (ESA), Sissy Iona (HCMR), Arthur Pasquale (INFO-RAC, ISPRA), Alessandra Giorgetti (OGS).

1 RATIONALE

Data sharing roots on the paradigma of the Open Science saying "*make data as open as possible, as restricted as necessary"* and is fundamental prerequisite for a "transparent & accessible Mediterranean Sea".

Overall objectives of the Task Team 6 (TT6) are:

- Facilitating access to data.
- Narrowing the gaps between the North and South Mediterranean shores reinforcing partnerships and transboundary cooperation and contributing to reduce inequalities, leveraging on digital opportunities and accessibility.
- Contribute to the IOC International Oceanographic Data and Information Exchange System and Ocean Best Practices System, and to the Regular Process for Global and Mediterranean Reporting and Assessment of the State of the Marine Environment.

2 BASELINE

TT6 activities rely on unrivaled marine data and forecasting infrastructures created during the last 20 years through the European Research and Observation Framework Programmes and Strategies. Two Directorates-General of the European Commission, i.e. Defense, Industry and Space (DEFIS) and Maritime Affairs and Fisheries (MARE), are supporting complementary initiatives: Copernicus Marine Service and EMODnet, that both distribute open access marine data, interoperable and free of charge. DG DEFIS and DG MARE have signed in 2016 and then in 2019 a Memorandum of Understanding to closely collaborate in data management, data validation and product generation. In practice, the Copernicus Marine Service and EMODnet are joining forces at coordination and operational levels to emphasize the complementarity of their respective marine data offerings (Martín Míguez et al., 2019).

In 2006, SeaDataNet was initiated and since then has evolved into an operationally robust and state-of-the-art Pan-European infrastructure for providing open access to up-to-date and high quality marine metadata, data and data products at national, regional and global levels, in line with FAIR principles. It has been adopted in several other EU RTD projects and EMODnet with its seven discipline-based thematic lots.

Therefore, TT6 does not start from scratch but will build on relevant organizations and initiatives to further foster alignment and coordination in order to point out strengths and weaknesses in the data sharing at the basin scale.

Points of strength:

- Shared vision in TT6 on gaps and needs.
- Consolidated efforts in place (EMODnet Data Ingestion, EMODnet Thematic lots, infoMAP System managed by INFO/RAC, MONGOOS, Copernicus, SeaDataNet).
- MAP data policy developed by INFO/RAC approved by the Contracting Parties to Barcelona Convention and currently in place. During the current biennium the implementation phase will be supported.

Bottlenecks:

- Lack of data policy from high level / financing bodies.
- Need for education and training on data management principles.
- Lack of Data Literacy to understand the importance of data management.

3 ACTION POINTS

Task Team 6 identified the following outcomes in the discussion:

1. Establish a systematic and organized interaction and communication between organizations and networks as part of the short-term goals.
2. Reduce multiple submissions by data sources (e.g., by setting MoU for closer cooperation),
3. Ask for a minimum level of metadata and standardization (following FAIR principles) with credit to data providers.
4. Gather inputs and interact with the other thematic tasks to identify the SciNMeet necessity in terms of data.

The following concrete action points are recognized as needed:

1. During the three years' period, the activities will be focused on setting interrelations and harmonization among existing data platforms, in order to pave the way towards their coupling, as feasible and increased data availability; this needs to result in the following concrete outputs:
    - Data use policy (strategic level).

- Interoperability (management level).
- Tools, formats, parameters, etc. (technical level).

2. Expand the team:

   - identification of relevant data sources.
   - representatives of Southern Mediterranean countries to extend geographic coverage.

2. Ensure sustainable funding.

TASK TEAM 7: KNOWLEDGE TRANSFER & CAPACITY BUILDING

Facilitators/ Rapporteurs: Ahmed Siliman (FAO-GFCM).
Participants: 7.
Chair: Domenico D'Alelio (SZN).
Co-chair(s): Ahmed Siliman (FAO-GFCM).
Participants: Ahmed Siliman (FAO-GFCM), Inès Boujmil (BlueMED, ECOPs, AquaBiotech), Suzan Kholeif (NIOF), Roberto Emma (FAO-GFCM), Marco Borra (SZN, COI), Raffaella Casotti (SZN), Cristica Cervara (IEO).

1 RATIONALE

Task Team 7 (TT7) has been established as a cross-cutting activity to support several objectives of the SciNMeet Programme. One of its key roles is to work collaboratively with other thematic Task Teams to implement practical actions that help achieve the programme's goals.

At its core, the group's main objective is to enhance capacity building efforts throughout the Mediterranean Sea region. This includes working towards narrowing the gaps between the North and South Mediterranean shores, strengthening partnerships, and promoting transboundary cooperation. In doing so, the group aims to contribute to reducing inequalities in the region.

In line with the GFCM's 2030 Strategy and other regional commitments, the Task Team also aims to promote technical cooperation and develop knowledge sharing, providing scientific and methodological insights into relevant topics. For instance, innovative technologies can be identified and replicated throughout the region. Scientific and technical support can be adapted to each Mediterranean country, improving information sharing on main topics such as technology and data on environment, fishing, and surveillance.

Through these efforts, TT7 will play a crucial role in promoting sustainable development throughout the Mediterranean Sea. By working closely with other stakeholders and supporting capacity-building initiatives, the group hopes to foster greater understanding and cooperation among Mediterranean countries. Ultimately, this will lead to a more equitable, resilient, and prosperous region for all its inhabitants.

2 BASELINE

TT7 aims to reinforce its membership by identifying missing profiles, such as foundations, technical providers for innovative technologies including satellite observations, etc. TT7 has also identified its general priorities:

1. Addressing North-South gaps;
2. Facilitating access to data equipment and technologies;
3. Focus on gender;
4. Development of Blue jobs;

5. Involvement of youth;
6. Sharing of knowledge between scientists and civil society;
7. Involvement of the private sector in the capacity building activities.

TT7 is directed at carrying out several objectives of the SciNMeet Programme. It is linked and coordinates with other Task Teams, and works particularly with the following projects:

- GFCM - GFCM 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea (GFCM 2030 Strategy).
- Programme of Work of UNEP/MAP: Activities related to Science Policy Interface; EcAp III Project and IMAP-MPA Project;
- BLUE BIO MED – Mediterranean Innovation Alliance for Sustainable Blue Economy.

3 ACTION POINTS

To address future action points, the TT7 has drafted a workplan of the duration of three years with relevant objectives:

Year 1 and 2:

- Conduct a state-of-the-art assessment of knowledge sharing and capacity building initiatives at national and subregional levels, including identifying gaps and exploring ways to improve the dissemination of knowledge.
- Map out relevant Ocean Decade Initiatives for the Mediterranean Sea in support of IOC-UNESCO's efforts.
- Identify key stakeholders and clusters and explore opportunities to increase regional and subregional partnerships.
- Identify knowledge sharing platforms, innovative technologies, and best practices in the region to support capacity building and knowledge sharing efforts.

Year 3:

- Organisation of event on sharing knowledge on different topics (e.g. climate change; marine pollution, etc.) including share experience and best practice.
- Activities related to involved of youth (e.g. communication campaigns on blue possibilities)
- Field activities related to capacity building in testing innovative technologies (fields to be selected in coordination with other Task Teams).
- Communication plan of the TT7.
- Launch of dedicated calls for funds for the implementation of the activities.

The team has suggested to launch dedicated calls for funds for the implementation of the activities.

MOVING FORWARD

Under the strategic guidance of the Steering Committee and with the coordination and support of the Scretariat, the TTs will conduct specific activities as addressed in the Terms of Reference (ToR). Acting as a think tank to deliver innovative ideas for actions on challenging Mediterranean R&I issues, they will together contribute to set-up a long-lasting science-to-policy Regional Cooperation framework. In this framework, a key mid-term milestone will be the delivery of an integrated progress report on the Status of the Mediterranean Sea.

ACKNOWLEDGMENTS

The authors would like to thank the Italian Oceanographic Commission, the Interim Steering Committee, the Moderators, the Rapporteurs, TTs coordinators, all speakers and participants for the joint collaboration before, during and after the launch event, as well as CNR for hosting SciNMeet.

Figure 4 – Photos of the Launch Event at CNR Headquarter (speakers and audience)

LIST OF MAIN INSTITUTIONS AND ORGANIZATIONS

BBSF - Balkan and Black Sea Business Institute
BTU - Brandenburg University of Technology
CNR - National Research Council of Italy
COI - Italian Oceanographic Commission
CSIC - Consejo Superior de Investigaciones Científicas
DUT - Democritus University of Thrace, Department of Primary Education
EC - European Commission
ECOPs - Early Career Professionals Programme
EGERTON - Egerton University
EMSEA - European Marine Science Educators Association
EMUNI - Euro-Mediterranean University
ENEA - Italian National Agency for New Technologies, Energy and Sustainable Economic Development
ESA-ESRIN - ESA Centre for Earth Observation
EuroGOOS - European Global Ocean Observing System
FAO-GFCM - Food and Agriculture Organization-General Fisheries Commission for the Mediterranean
FGF - Fundação Gaspar Frutuoso
FISPMED - International Federation for Sustainable Development and Poverty Reduction in the Mediterranean-Black Sea
FM6E - Mohammed VI Foundation for Environmental Protection
FORUMFED - Forum of Federations
GB - Guardians of the Blue
HAIFA - Haifa University
HCMR - Hellenic Centre for Marine Research
HEIS - Hydro-Engineering Institute Sarajevo
IEO - Spanish Institute of Oceanography
IFISC (CSIC-UIB) - Institute for Cross-Disciplinary Physics and Complex Systems (the Spanish National Research Council and University of the Balearic Islands)
IFREMER - French Research Institute for Exploitation of the Sea
IIM - Italian Hydrographic Institute
ILR - Israel Oceanographic and Limnological Research
IMEDEA - Mediterranean Institute for Advanced Studies
INGV - Istituto Nazionale di Geofisica e Vulcanologia
INSTM Carthage - National Institute of Marine Sciences and Technologies of Carthage
Interreg MED Programme
IOC-UNESCO - Intergovernmental Oceanographic Commission of UNESCO
IOR - Institute of Oceanography and Fisheries

IRTA - Institute of Agrifood Research and Technology
ISPRA - Italian Institute for Environmental Protection and Research
MCAST - The Malta College of Arts, Science & Technology
METU - Institute of Marine Sciences, Middle East Technical University
Ministry for Environment Tunisia
MIO-ECSDE - Mediterranean Information Office for the Environment, Culture and Sustainable Development
MOI - Mercator Ocean International
NIB - National Institute of Biology, Marine Biology Station Piran
NIOF - National Institute of Oceanography and Fisheries
NOAA - National Oceanic and Atmospheric Administration, Southwest Fisheries Science Center
OGS - National Institute of Oceanography and Applied Geophysics
ORION - ORION Joint Research and Development Center of Cyprus
PLYMOUTH - University of Plymouth
Regional Cluster "North-East"
SDG4MED - Sustainable Development Goals for the Mediterranean
SHODB - Office of Navigation, Hydrography and Oceanography of Turkey
SOCIB CAIB - Ministry of Science and Innovation
SZN - Stazione Zoologica Anton Dohrn
TBA21 - TBA21 Academy - Ocean Space
UAE - Abdelmalek Essaadi University
UH1 - Hassan First University of Settat
UNEP/MAP - United Nations Environment Programme / Mediterranean Action Plan
UNIBO - Alma Mater Studiorum University of Bologna
UNIBZ - Free University of Bolzano-Bozen, Faculty of Education
UNIC - University of Nicosia
UNICAM - University of Camerino
UNIV-SFAX - University of Sfax
USC - Universidad de Santiago de Compostela
WMU - World Maritime University
YLE-FOUNDATION - Youth Love Egypt Foundation

ANNEX I – AGENDA

Day 1, 12:30 - Welcome Coffee	
Moderator: Rosalia Santoleri, President, Italian Oceanographic Commission	
13:30-13:45 - *Welcome and introduction* Maria Chiara Carrozza, President, National Research Council of Italy (CNR) Michele Mazzola, Director, Ministry of University and Research (MUR)	
Opening and launch of the SciNMeet Programme	
13:45-14:00	**UN-Decade and regional dimension** Vladimir Ryabinin, Executive Secretary of the Intergovernmental; Oceanographic Commission of UNESCO (on-line)
14:00-14:15	**Ensuring the contribution to the Horizon Europe Mission 'Restore our ocean and waters by 2030'** Elisabetta Balzi, Head of Healthy Ocean and Seas Unit, European Commission, DG Research and Innovation and Co-Chair BlueMed Initiative
14:15-14:30	**Towards a UN-Decade Med Collaborative CentreThe vision: science-policy in the Mediterranean by UNEP-MAP. Contributions to Ocean Decade and the Ecosystem Approach** Tatjana Hema, Mediterranean Action Plan Coordinator, United Nations Environment Programme, Barcelona Convention Secretariat
14:30-14:45	**Introduction to SciNMeet** Rosalia Santoleri, President, Italian Oceanographic Commission COI
14:45 - 15:00	**Aligning the Strategy of the General Fisheries Commission for the Mediterranean for healthy environment and resources** Miguel Bernal, Senior Fishery Officer, General Fisheries Commission for the Mediterranean GFCM-FAO
15:00 - 15:10	**Mediterranean Region, years of cooperation opportunities** Francesca Marcato, Joint Secretariat, INTERREG-MED Programme
15:10-15:20	**The role of Ocean Literacy, launching the SciNMeet website** Francesca Santoro, Programme Specialist, IOC UNESCO Regional Bureau for Science and Culture in Europe
15:20-15:30	**Introduction to the Task Teams and objectives of the parallel sessions,** Margherita Cappelletto, Italian Oceanographic Commission Secretariat

15:30 - 16:15 - Coffee break and Virtual poster session (EMPOWERING WOMEN, SMARTNET, SUPREME, OCEAN CORPS, COESSING)	
16:15-19:00 - Task Teams Parallel sessions	
TT1 = Climate Change > Facilitator: Andea Storto > Room Silvestri (2nd floor, 'new building') TT2 = Marine Pollution > Facilitator: Christina Zeri > Room Golgi (2nd floor, 'new building') TT3 = Marine Hazard > Facilitator: Angela Pomaro > Room Convegni (same as plenary) TT4 = Ocean Literacy & Education > Facilitator: Francesca Santoro and Alessandro Gibertini (CNR) > Room Picone (1st floor) TT5 = Ocean Observing & Prediction > Facilitator: Katrin Schroeder > Room Volterra (1st floor) TT6 = Data Sharing > Facilitator: Alessandra Giorgetti > Room Aula D (5th floor, 'new building') TT7 = Knowledge Transfer / Capacity Building > Facilitator: Ahmed Siliman > Room 3D (ground floor, next to Convegni)	
19:30 - Social dinner @ The Apartment Bar, Via dei Marrucini, 1A, Roma (in front of the venue)	
Day 2nd, h 08:45-13:00	
Moderator: Inés Boujmil, National Institute of Marine Sciences and Technologies (INSTM), Tunisia, BlueMed Ambassador in Tunisia	
08:45-09:30	**Task Teams stage setting towards the SciNMeet Implementation Plan** Task Teams' Facilitators: Andrea Storto (COI), Christina Zeri (HCMR), Angela Pomaro (COI), Francesca Santoro (IOC), Katrin Schroeder (COI), Alessandra Giorgetti (COI), Ahmed Siliman (GFCM)
09:30-09:40	**Q&As** Audience and speakers
09:40-10:00	**Keynote - Representing the seafloor in 4D: technical challenges and conceptual problems** Fabio Trincardi, Director, CNR Department of Earth System Science and Environmental Technologies
10:00-10:05	**Unveiling the SciNMeet Logo** Lorenza Evangelista and Alessandro Gibertini, Italian Oceanographic Commission Secretariat announcing the winner of the competition
10:05-10:10	**Empowering youth for the Mediterranean We Want, the Early Career Ocean Professionals (ECOPs) Programme** Inés Boujmil and Hany Heiba, ECOP Programme Africa

10:10-10:50	**Strengthening networking and international collaboration within the Ocean Decade, introducing the Global Stakeholders' Forum (GSF) and experiences of National Decade Committees (NDCs)** Introduction by Olivier Duforneaud, Ocean Decade Community Coordinator, Intergovernmental Oceanographic Commission of UNESCO - Best practice sharing by established Mediterranean NDCs: Italy (Roberta Ivaldi), Spain (Rafael González-Quirós), Slovenia (Vesna Flander-Putrle), France (Marie-Alexandrine Sicre), Türkiye (Emre Tükenmez)
10:50-11:30 - Coffee break & Virtual poster session of Decade Programmes (EMPOWERING WOMEN, SMARTNET, SUPREME, OCEAN CORPS, COESSING)	

11:30-12:05	**IOC Commissions, Groups and Programmes alignment with SciNMeet**
	- Kouadio Affian, Chair of IOC's Sub Commission for Africa and the Adjacent Island States (IOCAFRICA)
	- Marie-Alexandrine Sicre, Chair of IOC Group I
	- Karim Hilmi, IOC Vice-Chair Group V
	- IOC/Decade Programmes on:
	  - Ocean Literacy With All (OLWA), by Francesca Santoro
	  - Intergovernmental Coordination Group for the Tsunami Early Warning and Mitigation System in the North-eastern Atlantic, the Mediterranean and connected seas (ICG/NEAMWTS) and IOC EU ECHO ICG/NEAMTWS, by Denis Chang
	  - International Oceanographic Data and Information Exchange (IODE) and Global Ocean Teachers' Academy, by Peter Pissierssens
	  - Global Ocean Observing System (GOOS), by Emma Heslop

12:05-12:30	**Pitches by Decade Programmes and other Projects relevant for SciNMeet** - Coastpredict and the Decade Collaborative Center, Nadia Pinardi, University of Bologna - Ocean Observation Morocco, National Decade labelled Programme, Karim Hilmi, IOC Vice-Chair Group V - PREP4BLUE, Claudiane Chevalier, French Research Institute for Exploitation of the Sea (IFREMER)

	- SHAREMED, Cosimo Solidoro (OGS and COI) and Aldo Drago, Malta College of Arts, Science & Technology (MCAST)
12:30-12:50	**Q&As** Audience and speakers
12:50-13:00	**Conclusions and next steps** Daniele Bosio, Counselor, Ministry of Foreign Affairs (MAECI) Rosalia Santoleri, President, Italian Oceanographic Commission (COI)
13:00 Light Lunch	

ANNEX II – FORMAT OF TASK TEAMS TERMS OF REFERENCE

The Science We Need for the Mediterranean Sea We Want. Towards SciNMeet Terms of Reference to support the operationalization of the Task Teams (TTs) and prepare the launch event.

This document provides **mandate and useful guidelines for the functioning of the SciNMeet seven Task Teams** supporting the implementation of the Programme. These are intended as thematic and cross-cutting lines of action to be addressed by the Programme in its initial phase, i.e. first 3-yrs. While derived from the Proposal submitted to the Decade Call for Action 01 and endorsed by the IOC-UNESCO, two key documents of reference need to be considered for the operationalization of the Task Teams: the SciNMeet 3-yrs Operational Plan and its enclosed Annex, i.e. the White Paper "The Mediterranean Sea we want" accepted for the Special Issue of Ocean Decade Community White Papers (CWPs) on the Global South at Ocean and Coastal Research Journal available at this link. Outputs of the preparatory works held in 2020 (i.e. Venice workshop and virtual co-design workshop) can also be consulted at this webpage.

TTs = Lines of action

TT1 = Climate Change
TT2 = Marine Pollution
TT3 = Marine Hazard
TT4 = Ocean Literacy & Education
TT5 = Ocean Observing & Prediction
TT6 = Data Sharing
TT7 = Knowledge Transfer/Capacity Building

Name	Role	Institute	Country
	Leader		
	Co-Leader		
	Expert		
	Expert		
	Expert		
	Expert		

	Expert		
	Expert		
	Expert		
	Expert		
	Expert		
	Expert		
	Expert		
	Expert		

Rationale

[This section needs to be completed by providing indications on the scope of the TT, including impact driven specific objectives. Refer to the SciNMeet Proposal and the Operational Plan]

Objectives, outcomes, tasks and deliverables

Supported by the SciNMeet Secretariat, each Tasks Team contributes to the objectives, outcomes and activities of the Programme set out in the proposal as follows. The TT activities do not start from scratch and build on relevant organizations and initiatives to further foster alignment and coordination.

Objective	**Task Team**	**How to achieve it**
Enhancing cooperation opportunities towards optimal partnerships by elaborating a shared regional strategic roadmap for the Mediterranean Decade and beyond	All	
Promoting the co-design and co-production of solutions to the problems	All	

Objective	Task Team	How to achieve it
Keeping the marine space under permanent review	TT1, TT2, TT3, TT5	
Providing an integrated, long-term, in situ and satellite observations systems, modelling reanalysis and predictions	TT5	
Promoting regional and national initiative(s) to fill the gap of sustained in situ observations	TT5, TT7	
Fostering the generation of dedicated research and innovation	All	
Facilitating access to data and equipment	TT6, TT7	
Increasing Mediterranean society's awareness and knowledge about the crucial importance of a healthy Mediterranean Sea	TT4	
Narrowing the gaps between the North and South Mediterranean shores reinforcing partnerships and transboundary cooperation and contributing to reduce inequalities	TT6, TT7 and All	

Outcome	Task Team
Definition of a long-lasting science-to-policy Regional Cooperation framework for the integrated management of the Mediterranean Sea and its resources	**All**
Regular delivery of a comprehensive periodic report co-designed with policy and decision makers on the status of the Mediterranean Sea space, marine ecosystems and biodiversity	TT1, TT2, TT3, TT4, TT6

Harmonized Integrated Open Monitoring and Assessment as contribution to International Oceanographic Data and Information Exchange/Ocean Best Practices System	TT6
Extended range of observables, data, and products by exploiting the synergy of in situ and space observation	TT5
EOVs long term observations, reanalysis and prediction as Mediterranean contribution to the GOOS	TT5
Reliable quantitative set of indicators and analysis tools to contribute to the Ocean State Report, the Integrated Monitoring and Assessment Indicators (IMAP), and the Mediterranean Sustainability Dashboard datasets, informing the UN Regular Process for Global Reporting and Assessment of the State of the Marine Environment	TT1, TT2, TT3, TT5, TT6
Improved models and related prediction capacities of the Mediterranean Sea	TT1, TT5, TT7
Integrated design of a Mediterranean tailored multi-hazard early warning system	TT3
Portfolio of solution-oriented demo actions	TT1, TT2, TT3, TT4, TT5, TT6
Constellation of Educational and Ocean Literacy Regional Platforms	TT4
Accelerate uptake of digital opportunities and accessibility to reduce the gaps in data, information and science knowledge between and among the Mediterranean, across gender and generations	TT6

Tasks

SciNMeet TTs activities detailed in the table below revolve around five different assets: generating knowledge; monitoring and accessibility; provision of solutions and services for safety and sustainable productivity; integrated governance; inspiration and engagement. Moreover, each Task Team is in charge of:

- Continuously provide technical support to the SciNMeet Secretariat, including on activity frameworks (e.g. provision of inputs to reply to specific requests by the IOC Secretariat), stakeholders' engagement (including youth) and communication inputs, including to feed the website and related social-media channels
- Support to the SciNMeet governing bodies, including through participation to meetings and events and animation of the Stakeholders' Forum, including by identification of relevant actors from different sectors, including beside science and policy actors, private companies, local and indigenous knowledge holders, Early Career Ocean Professionals, NGOs, Aquariums, zoos and museums, Local coastal communities, Accademia and Educators, media organizations, etc…).
- Organize relevant meetings, workshops, foresight/backcasting exercises, etc.
- Prepare the proposals to the relevant Call for Actions to further support the Programme.

Milestone	**Task**	**Task Team**	**Deadline**
M1	Launch event and ToR validation	All	Q1
M2	Assessment of available capacities	All	Q1
M3	Definition of synergies with relevant projects/initiatives to align and ensure the contribution of SciNMeet to the implementation of relevant framework programmes and strategies.	All	Q1
M4	Analysis of required funding and budget identification, including in cash and in-kind contribution, for the initial coordination phase and networking activities needed to start-up the Programme and prepare the Implementation Plan + the full implementation phase, according to the Decade Coordination Unit template. Provisional availability to contribute might include research and technical staff, available existing facilities (e.g. data, access to marine	All	Q1

	infrastructures) and will be further assessed by the Steering Committee. Additional sources of funding that can be explored include traditional mechanisms, such as research grants within European Funding Programmes (e.g. Horizon Europe, Interreg Med, Life Programme, ESA Mediterranean Sea Regional Initiative, etc.), donations and other financial support via the Global Stakeholders Forum, the Ocean Decade Alliance and Decade Coordination Unit, as well as partnerships with the private sector.		
M5	Contributing to the resource needs assessment (preliminary template circulated by IOC at this link) by drafting a business plan including tentative budget breakdown for further activating fundraising through monitoring upcoming institutional, local, national, EU and international opportunities	All	Q1
M6	Contribution to the definition of a set of Key Performance Indicators (KPIs) to monitor the progress and impacts	All	Q2
M7	Liaising with Decade Actions (list of the 1st Call actions available at www.oceandecade.org/wp-content/uploads//2021/10/353232-Endorsed%20Decade%20Actions%20-%20October%202021) and EC funded projects (Med Lighthouse Coordination and Support Action and Innovation Actions) to align with IOC and EC Programmes	All	Q2
M8	Prepare the TT co-design	All	Q2
M9	Prepare the outputs validation workshop as follow-up of the co-design workshop (can be virtual)	All	Q2
M10	Contribution to the Strategic roadmap	All	Q3
M11	Contribution to the Implementation and Investment Plan	All	Q3

M12	Development of foresight/feasibility studies or collaborative actions according to the need of the TT	All	Q4
	Design of Research and Innovation Actions as possible contribution to next Decade Call for Actions to be launched (including in the framework of the UN-Decade)	TT1, TT2, TT3, TT5, TT6	Q4
D2	Promotion of standardized/expanded monitoring systems and open data access	TT5, TT6	Q4
D3	Design innovative ideas and solutions	All	Q4
D4	Contribution to the Progress report as contribution to the Programme	All	Q6

Mandate

The TT mandate is to support the implementation of the SciNMeet Programme by providing a strategic vision, direction, and coordination of specific lines of action. This TT is committed to ensure a participated transparent process, including by promoting co-design, circulation of information and through members' attendance to relevant meetings and events. Gender, geographical and generation balance will be ensured.

Engagement of TT members

At the beginning, a list of up to 12-15 relevant experts is proposed and further validated, including on the basis of CV evaluation, by the SciNMeet Programme (Interim) Steering Committee, ensuring a good geographical, gender, age and discipline balance. Continuity, in terms of composition, with relevant working groups of the preparatory co-design event, i.e. Venice workshop (Jan 2020) is suggested.

Task Teams can be renewed every 2 years. New members are suggested by the organizations supporting the SciNMeet Secretariat and Task Teams themselves submitting proposals of names to the SciNMeet Secretariat. The Steering Committee finally validates them. Gender, geographical, age and discipline balance is taken into consideration in this selection as well as concrete needs of the Task Teams.

IOC programmes as other relevant programmes and individual experts can be invited to join the Task Teams.

In case of need of specific technical tasks to be carried out within the Task Teams, an external targeted technical expertise should be foreseen and supported by the Secretariat as appropriate.

Chair and co-Chair

The Chair and co-Chair participate in relevant meetings of SciNMeet governing bodies, refer to the SciNMeet Programme Director and transmit the outputs of the meetings and other relevant reports. They report to the Secretariat and receive assistance from the Programme Director and the three Secretariat sections.

The Chairs and Co-Chairs of the Task Team are identified among the Task Team`s members and appointed within the Task Team for a period of 2 years. The Chair participates in the Steering Committee.

Facilitator

Technical support to the coordination of the activities of each TT is provided by a facilitator at least until the date of the kick-off meeting.

Composition and link to the governance

Each Task Team is composed of up to 12 - 15 experts belonging to the organizations supporting the Secretariat and other relevant Mediterranean community organizations and selected on the basis of their expertise among a shortlist provided by the Interim Steering Committee organizations. Gender, geographical, age and discipline balance is respected in the selection, as well as the complementarity of backgrounds and hard/soft skills. National Decade Committees can also propose candidates to the Task Teams. IOC programmes can also be invited to join the Task Tems. Task Team coordinators, i.e. the Chair and the Co-chair, are identified among these experts and appointed within the Task Team.

As per the SciNMeet governance Outline, the leaders and co-leaders of the TT sit at the Steering Committee.

Operation of the Task Team

Working modality, including meetings

The TT is responsible for providing effort to timely deliver the activities. Each TT will implement desk work and meet, including in remote, at least twice/yr and whenever the need arises. To implement the activities, the Chair and Co-Chair identify within each TT sub-groups of up to three people and assign specific activities to them, according to their expertise, aptitude and skills. During TT meetings, convened by the Chair, members report on progress made towards the core project main objectives and make the group aware of any funding opportunities arising. To avoid

working in silos, at least one transversal meeting per year is foreseen among all TT chairs and co-chairs for alignment and cross-fertilization. Participation of external members, including experts, as observers is allowed.

Duration

The mandate and composition of this TT starts the 14th of July 2022 and lasts for 2 years, up to 2024. These ToRs will be regularly revised every 18 months and possibly extended after its end. Task Teams'. ToRs are anchored to the living Operational Plan and can be modified accordingly, including establishment of new Task Teams as needed.

ANNEX III – PRESS REVIEW

The following list of references, the majority of which from Italian networks, is updated at the date of the publication of the present report.

Teleambiente
https://www.teleambiente.it/scinmeet-programma-internazionale-salvare-mediterraneo-video/

Askanews
https://www.askanews.it/video/2022/07/13/mediterraneo-da-salvare-sfide-e-obiettivi-del-programma-scinmeet-20220712_video_19085319/

Affari Italiani
https://www.affaritaliani.it/coffee/video/scienza-tecnologia/mediterraneo-da-salvare-sfide-obiettivi-del-programma-scinmeet.html

Il Sole 24 Ore
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Agensir
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