Workshop report:

BLUE ECONOMY IN THE MEDITERRANEAN:

TOWARDS DATA-DRIVEN SUSTAINABILITY IN MEASURING THE MEDITERRANEAN BLUE ECONOMY

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Contents

1. Executive Summary

The workshop "Towards data-driven sustainability in measuring the Mediterranean blue economy" took place on 23 November 2023 at Plan Bleu's offices in Marseille, France. The workshop brought together 20 in-person participants and 88 people who signed up to follow online from the southern, eastern and northern Mediterranean, representing the Contracting Parties to the Barcelona Convention, scientific research institutions and projects, NGOs and UNEP-MAP components.

This workshop was organised as part of Plan Bleu's 2022-2023 bi-annual work programme.

Main objective:

The primary objective of the workshop was to define a conceptual framework for assessing the sustainability of the blue economy in the region. A conceptual study was presented and reviewed for this purpose, which will then be finalised. The workshop also aimed to further the understanding of existing data, platforms, measurements and stakeholder organisations relating to this theme in the Mediterranean Basin. More specifically, the workshop provided an opportunity to:

- Co-develop a transition framework for the sustainable blue economy to support countries in their development of the sustainable blue economy;
- Assess the options and feasibility of progress monitoring based on the data available in a region and its socio-economic and environmental context;
- Identify a relevant, acceptable, credible, measurable and robust set of indicators, data and information on the blue economy. In the long term, this will be a key resource for policy-makers, researchers and stakeholders, to strengthen the Mediterranean region's ability to transition to a sustainable blue economy. This aspect is linked to the Plan Bleu Regional Observatory, which is where the indicators will be implemented.
- Foster convergence, collaboration and cooperation among Mediterranean stakeholders by bringing together representatives from government, industry, academia, civil society and

local communities. The aim of the workshop was therefore to define priorities, shared goals and collective strategies for moving towards a sustainable blue economy throughout the Mediterranean Basin.

Key points

- The workshop highlighted the need for an integrated monitoring and evaluation framework, highlighting key aspects such as clarifying mandates, securing long-term funding, creating a baseline for measuring progress, and effectively integrating data into decision-making processes. In addition, the variability of indicators and the challenges of data collection and standardisation in the Mediterranean region were underlined, highlighting the complexity of measuring the sustainability of the blue economy.
- While sector-specific indicators are already in place, Plan Bleu is still working to develop cross-cutting indicators, particularly for aspects such as waste reduction, inclusive governance and blue carbon assessment. The workshop highlighted the shortcomings of current indicators, and especially the need for concrete, measurable social indicators, as well as the challenges of data collection, requiring standardisation, improved quality and wider geographical coverage.
- The need to take into account the land-sea relationship was raised, as well as the importance of these indicators at different scales (local, regional and Mediterranean), and the need to make this information accessible to and understandable for decision-makers and stakeholders.
- Various indicators for assessing the sustainability of specific sectors of the blue economy were proposed. These include:
    - Fisheries: Percentage of fish landings with catch certificates, Rate of growth in direct sales at fish markets and auctions
    - Sustainable tourism and leisure: Number of mooring areas equipped to prevent anchoring, Number of marinas certified as “Clean Ports” by the European Union.
    - Marine renewable energies: Rate of development of shared connections for commercial plants, Rate of experimentation with co-activities within these facilities, such as fishing or aquaculture.
    - Aquaculture: The rate of feed conversion per unit of aquaculture production; The rate of pollution released into the ecosystem; The proportion of fuel and renewable energy used in production; The percentage of juveniles, as this indicator defines the resilience of the activity; The composition of aquaculture feed (fish/algae to feed fish); The rate of circularity, i.e. the rate of biomass conversion (e.g. collagen production from fish) and the recycling rate of secondary products (peptides, medicines, etc.).
    - Cross-cutting: the land development of the coastline and seabed
- The need to adopt narrative approaches that are accessible to all, as well as to develop specific indicators for new emerging activities in the blue economy were underlined, while emphasising the involvement of stakeholders and the development of synergies, including at local level, to achieve a sustainable blue economy

- Emphasis was placed on social inclusion, highlighting the need to develop specific indicators to measure the inclusion of women in these sectors, and to explore more holistic data to fully understand their impact.
- A strategic recommendation proposed the regular publication of communications by the Plan Bleu Observatory, potentially with a monthly presentation called “Map of the Month”. This initiative would aim to disseminate information effectively and consistently, offering stakeholders valuable insights and updates on coastal and environmental economy issues.
- Recommendations for pilot sites (the Ionian Islands in Greece, the city of Palamos in Spain, the Island of Zembra and the Gulf of Gabès in Tunisia, the Pelagos sanctuary, the city of Nice, or the south-eastern Mediterranean) offering already available data were presented, broadening the understanding of maritime activities and their impact on the sustainability of the blue economy in the region.
- Various relevant partnerships and initiatives were discussed. In particular:
    - the creation of the Blue Mediterranean Partnership (official signing of this financing decision is scheduled to take place on the sidelines of the COP 28 conference), is a major financial initiative to support investment in the Mediterranean blue economy, involving key financial players such as the EIB, the EBRD and the development banks of EU member states, with implementation planned via existing EU DG NEAR instruments, such as the EIP and the EDFD, to encourage investment via mixed financing mechanisms and bank guarantees. This initiative will require concrete indicators that reflect the Blue Economy in the region.
    - the EU has a conceptual framework (MSP Data Framework) for identifying and structuring the data needed for maritime spatial planning. It provides the structure for organising the spatial input information and data that must be taken into account in the entire maritime spatial planning process. The EU is setting up a Blue Economy Observatory with an associated dashboard, based on harmonised data and sectoral sustainability indicators to measure progress towards a sustainable blue economy, with an emphasis on integrating qualitative indicators such as job quality and gender inclusion. These efforts aim to serve as a sustainability benchmark for EU countries, while identifying four key areas to accelerate this transition to a sustainable blue economy.
    - As stressed by the IOC-UNESCO representative, the current GOOS Essential Ocean Variables (EOVs) could directly support some of the integrated indicators planned under the Plan Bleu initiative, especially in the biological and ecological space. Additionally GOOS has work underway to define baseline indicators that will be required by multiple stakeholders, and collaboration with the Plan Bleu work to identify the observations and indicators to support compound indicators for blue economy and society would be beneficial. The Mediterranean Basin was mentioned as an important pilot area for data collection in support of Plan Bleu initiatives in a collaborative approach. The concentration of various economic and environmental activities in the region makes it an ideal location for collecting accurate and meaningful data, offering a major opportunity to fully harness the potential of GOOS in this specific area.

Results

- The constructive comments received on the scoping study will enable the authors to finalise their work in a more informed and thorough manner.
- An informal but committed community has been formed, to work on fine-tuning the conceptual framework and initiating the first phase of its implementation.
- Specific geographical areas for future application of the framework in case studies were clearly identified, providing concrete anchor points for putting it into practice.
- Proposals for activities that could enrich the Plan Bleu work plan on the blue economy for the coming biennium (2024-2025) were submitted, offering concrete ways to expand and improve initiatives in this field.

2. Introduction, background

At present, there are several definitions of the blue economy, some of which differ as to its inherent sustainability. UNEP defines the blue economy as: "an approach to governing the ocean and coastal systems that facilitates the creation of equitably shared economic and social benefits, including across generations, from ocean and coastal resource use, while ensuring that the ecosystems upon which most ocean and coastal resources depend are not degraded and, where possible, are restored to a healthy, functioning state". (UNEP, 2021)

As part of the development of its activities, Plan Bleu set out to clarify and provide a deeper understanding of the sustainability of the blue economy by organising a regional workshop. The aim of this workshop is to encourage collaboration, knowledge sharing and consensus-building among stakeholders, through several objectives:

- Co-develop a transition framework for the sustainable blue economy to support countries in their development of the sustainable blue economy;
- Assess the options and feasibility of progress monitoring based on the data available in a region and its socio-economic and environmental context;
- Identify an understandable and clear set of indicators, data and information on the blue economy. In the long term, this will be a key resource for policymakers, researchers and stakeholders, to strengthen the Mediterranean region's ability to transition to a sustainable blue economy. This aspect is linked to the Plan Bleu Observatory, which is where the indicators will be implemented.
- Foster convergence, collaboration and cooperation among Mediterranean stakeholders by bringing together representatives from government, industry, academia, civil society and local communities. The aim of the workshop was therefore to define priorities, shared goals and collective strategies for moving towards a sustainable blue economy throughout the Mediterranean Basin.

3. Workshop proceedings

The workshop took place on 23 November at Plan Bleu's offices in the Tour Marseillaise, Marseille, France. It took place over the course of one day, offering the opportunity for both in-person and online participation. A round-table format was used, encouraging lively discussion and enabling participants to actively engage and share ideas. Moreover, the audience played an essential role in shaping the content, with time devoted to questions and answers, inviting participants to put questions to the speakers.

An initial presentation by UNEP-WCMC on the blue economy framework, followed by a Plan Bleu scoping study on the sustainability of the blue economy in the Mediterranean, set the scene for the discussion to follow. Two main sessions were then dedicated to further enriching the study presented (and the indicator framework) and to inclusive stakeholder engagement, enabling in-depth discussions on innovative indicators and collaboration between various stakeholders.

4. Summary of scientific project presentations

4.1 Introductory presentations

Lina Tode (Deputy Director of Plan Bleu) and Constantin Tsakas (Programme Officer - Socio-economic analysis and blue economy at Plan Bleu) introduced the workshop by presenting Plan Bleu's goal to measure and monitor the sustainability of the blue economy in the Mediterranean.

The blue economy often comes under a variety of terminologies, but these names do not always accurately reflect its nature. There is still some uncertainty as to the extent of its "sustainability". The main objective of this workshop is to promote the sustainability of the blue economy by engaging in collective reflection to ensure its viability. This involves seeking out the relevant information, developing an integrated and sustainable framework, and discussing how to achieve it with all participants.

In the Mediterranean region, disparities in data availability and statistics vary from one country to another. The aim of this workshop is also to facilitate access to data to be entered into the Plan Bleu Observatory platform. This platform aims to show the links between the environment and development, providing an overview of the environmental situation and sustainable development in the Mediterranean. It provides a range of functions, including key indicators, to assist policymakers, UN agencies and other stakeholders in their decision-making processes.

4.1.1. UNEP World Conservation Monitoring Centre (WCMC) - Chris McOwen and Emma Lockerbie: Presentation of the WCMC Blue Economy framework

UNEP-WCMC is a global centre of excellence on biodiversity and nature's contribution to society and the economy. More specifically, this organisation has been working on the development of a transition framework for the sustainable blue economy, producing a desk review and looking for a pilot region to apply it.

During the presentation, the speakers stressed the need to integrate both human activity sectors at sea and the scientific disciplines and mandates of the institutions working in these sectors.
The UNEP definition of the blue economy was chosen: “an approach to governing the ocean and coastal systems that facilitates the creation of equitably shared economic and social benefits, including across generations, from ocean and coastal resource use, while ensuring that the ecosystems upon which most ocean and coastal resources depend are not degraded and, where possible, are restored to a healthy, functioning state”. (UNEP, 2021).
During the presentation, it was stated that the blue economy must take into account five guiding principles: Sustainable consumption and production; Equity and inclusiveness; Circular processes; Protection, restoration and regeneration of healthy ecosystems and Climate stability.

The speakers presented their study framework, organised according to the three pillars of sustainable development, principles, objectives and key indicators for monitoring the sustainability of the blue economy:

- Environment:

Principle: Protect, restore and regenerate healthy ecosystems.
Target: Implement monitoring programmes to check the extent and condition of natural ecosystems and the state of biodiversity.
Headline indicator: Changes to the extent and condition of water-related ecosystems over time

- Economy:

Principle: Deliver equitable and inclusive processes and outcomes.
Target: A diversified blue economy that supports small-scale users and businesses.
Headline indicator: Legal frameworks in place to promote, enforce and monitor equality

- Society

Principle: Deliver sustainable consumption and production
Target: Implement policies and regulations to retain resource consumption within sustainable limits.
Headline indicator: Number of companies publishing sustainability reports

This structure fragments the fundamental pillars of sustainable development, creating the key challenge of unifying them in a coherent and functional way. During the discussions, a number of considerations were shared concerning the implementation of the monitoring and evaluation framework. These key points include the need to implement a detailed action plan, identifying currently available data, their sources, and how they are used to guide decision-making and enable adaptive management. Clarifying mandates and responsibilities was a priority, as was securing stable, long-term funding to ensure ongoing monitoring and evaluation.

Creating a baseline for measuring progress, setting tangible targets and defining trends is a crucial point, which means that indicators need to be adapted to reflect the specificities of each country. Mechanisms need to be developed to effectively integrate data into decision-making processes. It is also essential to adjust this framework to align with the activities that fall within the scope of the sustainable blue economy. Finally, emphasis was placed on reusing and sharing data without creating additional work, in order to integrate them into political processes at national, regional and international levels to ensure maximum relevance and usefulness.

In response to a question about the number of indicators in their framework, WCMC's answer underlines the variability inherent in the system. They explained that the framework is made up of main indicators, including headline indicators and more specific indicators. Users are free to choose the indicators they wish to track, enabling a flexible approach tailored to their specific needs. In addition, the discussions highlighted the nuanced nature of data collection, particularly in the Mediterranean region. Emphasis was placed on the impracticality of mandating specific data collection requirements, recognising the potential constraints that such guidelines could pose.

The discussion then turned to the challenge of standardising data collection, particularly with regard to ocean knowledge encompassing factors such as carbon levels, temperature fluctuations, climate change and the impact of fishing activities while emphasising the need of a sustainable BE framework. Achieving complete standardisation poses difficulties, as evidenced by the variations in measurements of the state of coral due to different government grids.

4.1.2. Oceanogami - Emna Ben Lamine, Patricia Puig and Flavia Cavaliere: Presentation of preliminary results: "Scoping study to develop a Mediterranean pilot on measuring the sustainability of the Mediterranean blue economy", commissioned by Plan Bleu.

The presentation provided a reminder of the Mediterranean context. The Mediterranean is a biodiversity hotspot, with contrasting differences between its countries. The blue economy definition chosen was the same as that used by the UNEP WCMC speakers.
Indicators play a pivotal role in assessing the sustainability of the blue economy, shaping policies and guiding our decision-making process. During this study, commissioned by Plan Bleu, the participants presented their work in answering the following questions: What deficiencies exist in our current indicators for assessing sustainability? How do global/European indicator frameworks align with the Mediterranean context? Are our current indicators robust enough to gauge sustainability in both established and emerging sectors of the blue economy?
A range of sectoral and cross-sectoral indicators on different scales (global, European and Mediterranean) were presented. Overall, the lack of social indicators and the need for concrete, measurable indicators were highlighted. Gaps and challenges in the choice of indicators include the need for expanded indicators, improving data quality and geographical coverage, obtaining data at different geographic levels, developing a method for assessing the effectiveness of indicators, and standardising data collection. Clearly, the challenge is to bring together indicators within a global framework that can also be adapted to different contexts, while including the ecological dimension.
The operationalisation of the blue economy sustainability framework was detailed, based on four pillars: institutional, technical, governance and resources. First and foremost, stakeholder engagement is key to building a sustainable blue economy in the Mediterranean Basin. The aim is to involve coastal states, fishermen, aquaculture enterprises, tourism associations and conservationists. Their involvement offers numerous benefits, by fostering regional collaboration, utilising local expertise and ensuring the long-term viability of coastal tourism. Resources to support this collaboration include European Union (EU) funds, alliances and local government funds.
Then, with regard to cross-cutting indicators, efficient data collection, resource sustainability and effective implementation mechanisms, the authors would like to see a global framework with core indicators, facilitating assessment in the economic, environmental, social and governance fields.

The focus was on interconnection and vital strategies, exploring quantification methods and involving specific stakeholders. Each sector employs specific methods (emissions tracking in shipping, catch monitoring in fisheries, assessment of energy records in offshore wind energy, etc.). These methods involve collaboration with international bodies such as IMO, FAO, IRENA and local authorities. Understanding these data collection methods helps stakeholders to make informed decisions for a sustainable Mediterranean blue economy. Strategies to facilitate cross-cutting indicators, streamlined data collection processes, resource sustainability and effective implementation mechanisms are therefore essential.
Finally, proposals for pilot sites to measure and monitor the sustainability of the blue economy were presented. The Ionian Islands in Greece, the town of Palamos in Spain and the island of Zembra in Tunisia offer a diversity of maritime activities (fishing, aquaculture, tourism, port activities, etc.), in areas with rich biodiversity and already available data.

Finally, several priority issues were identified for discussion at the workshop. In particular: What indicators should be included in an ideal blue economy framework ? How can the social impact of blue economy activities be assessed comprehensively? What strategies are needed to develop universally applicable cross-cutting indicators? What governance structures can ensure continuous stakeholder involvement in evolving indicators? What mechanisms enable data-sharing agreements between stakeholders? How can digital platforms be leveraged to democratise data collection?

4.2 Session 1 - Expanding the framework of indicators

4.2.1. Plan Bleu - Antoine Lafitte: on the Plan Bleu Observatory and the need for new indicators and constant, easy-to-obtain data flows.

The Plan Bleu Observatory and indicators for monitoring the relationship between the environment and development were first presented. The Plan Bleu Regional Observatory is mandated to provide the contracting parties to the Barcelona Convention with a broad base of data, statistics and indicators to support their decision-making processes. The Observatory monitors the implementation of the Mediterranean Strategy for Sustainable Development (MSSD) through a dashboard of 28 indicators. This strategic document adapts international commitments (Agenda 2023) to the Mediterranean, guides national strategies and fosters regional cooperation to achieve sustainable development goals in the Mediterranean (UNEP, n.d.). Since 2020, the Observatory has been using a digital tool called MapX, a platform that illustrates the relationship between the environment and development, and tracks the state of the environment and sustainable development in the Mediterranean through different functionalities and at different scales (e.g. from the Mediterranean Basin to the national level or a bay).
Regarding Plan Blue's experience in measuring the sustainability of the blue economy, it was stated that the Observatory's role would be to monitor the interaction between economic activities (blue economy) and their environmental and socio-economic impacts. The Observatory already produces sector-specific indicators (such as sustainable fishing and aquaculture, offshore wind energy, socio-economic benefits of sustainable tourism, etc.). Cross-cutting indicators need to be developed (such as waste reduction and recycling, inclusive governance, blue carbon assessment, etc.). This work is based on projects already carried out by Plan Bleu, which have enriched its Observatory.
Finally, the methods used to select indicators and the comparison of the Observatory indicators with those proposed in the scoping study were discussed.

In the Q & A session that followed, Antoine Lafitte highlighted the existing data indicators within the Plan Bleu framework and the strategies used for data collection in different sectors.

- Existing indicators and collection method: it was clarified that some indicators already have data from the MSSD. These sector-specific and cross-cutting indicators have been developed in response to specific needs expressed by the countries involved. The changes to these indicators was highlighted, illustrating their ability to respond to changing requirements.
- Standardisation and data collection strategies: Plan Bleu aims to provide tools and services to meet the needs of member states. Standardising data collection poses challenges, particularly in defining the mandates of centres, as illustrated by INFO-RAC in Italy, which collects standardised data. For non-EU member states, projects are underway which focus on sharing experience and non-restrictive standards, particularly with a systemic approach. Adaptations in data monitoring strategies were deemed necessary, particularly with regard to the Sustainable Blue Economy.
- Data quality and real-time indicators: When it comes to assessing data quality, Plan Bleu relies on collected data, while recognising the need for organisations to carry out their own sorting due to capacity constraints. They intervene in unusual cases to maintain data

integrity. The discussion also focused on the availability of real-time indicators, highlighting tools/platforms such as WESR and MapX.

- Use of the strategy for sustainable development: the next MSSD (2025-2030) and its potential as a tool for consolidating indicators and fostering unity between different entities were discussed. However, concerns were expressed about renewing the strategy and the need for regular updates, underlining the importance of concise and effective strategies.
- Engagement with external methodologies: Although there is no direct engagement, the conversation acknowledged UNSD's development of the SEEA-Ocean methodology. The need for greater commitment to understanding priorities and needs was underlined.

4.2.2. Eco-union - Jérémie Fosse: on the lessons learned from the green economy monitoring indicator, which can be applied to the blue economy

In the framework of the Green Economy Coalition (GEC), a global coalition of Civil Society Organizations (CSOs) led by the International Institute for Environment and Development (IIED), Eco-union research team developed a protocol for evaluating the quality and ambition of more than 40 countries' public policies related to environmental and social sustainability by extracting and analysing data from public sources (Green economy tracker: https://greeneconomytracker.org). Evaluation is based on a detailed system of qualitative scores against a Green Economy framework developed and endorsed by the Green Economy Coalition. After the validation of the scoring by national consultants, users are able to comment directly each country ranking sheet directly on the platform, and provide additional information so that scores can be updated. This platform could be adapted to the blue economy in the Mediterranean, but requires a clear definition of what a sustainable blue economy is and a team of researchers to feed in the platform. A blue economy tracker could therefore accelerate the development of better policies to improve the sustainability and monitoring of the Mediterranean blue economy policies and practices.

4.2.3. DIRM (Direction interrégionale de la mer - France) - Julie Idoux: discussion on the development of a regular assessment of the blue economy in the Mediterranean and their strategy

Within the DIRM, the blue economy has been addressed through the need to translate the conciliation of uses, the preservation of ecosystems and the organisation of spaces into French law.

In 2019, the DIRM developed the strategic document for Mediterranean coastlines (strategic component). This document takes into account the current environmental concerns of the Mediterranean basin. In 2022, the action plan was adopted (operational component). The strategic component regarding environmental and socio-economic objectives is currently under revision.

Sustainability indicators were suggested by the DIRM to expand the framework established by the scoping study, each providing specific relevance in assessing the sustainability of various sectors of the blue economy.

- For the fishing industry, indicators such as the percentage of fish landed with catch certificates, or the rate of growth in direct sales at fish markets and auctions, offer a tangible view of the viability of this activity. The proportion of fish with catch

certificates highlights the commitment to sustainable fishing, while the change in direct sales reveals a possible shift towards shorter, more responsible supply chains.

- In the field of sustainable tourism and leisure, the suggestion of indicators such as the number of equipped mooring areas to avoid anchoring, or the number of marinas certified as "Clean Ports" by the European Union, offer concrete measures of commitment to the preservation of marine ecosystems and the adoption of environmentally-friendly practices.
- As far as marine renewable energies are concerned, indicators such as the rate of development of shared connections for commercial plants, or the rate of experimentation with co-activities within these facilities, such as fishing or aquaculture, are key measures of the shift towards more efficient and integrated use of marine resources. They also reflect efforts to maximize the use of existing infrastructure to promote sustainable, multifunctional practices within these areas.
- The Southern coasts of France (e.g. Nice coasts) were suggested to be included in the pilot sites for the sustainable blue economy framework

However, significant challenges have been identified, including the complexity of data collection and the sector-specific nature of current indicators. Although sales can be a relevant cross-cutting indicator, its value needs to be broadened to encompass wider social and environmental dimensions.

In addition, a number of key indicators have been suggested for further development, in particular those relating to coastline and seabed. This measurement spans across several sectors such as tourism, port activities, marine energy and aquaculture, providing an overall view of the impact on the marine environment. Land development is recognised as one of the main causes of biodiversity erosion, underlining the crucial importance of this indicator in assessing the sustainability of activities in these sensitive coastal areas.

4.2.4. CASE - Karolina Zubel: on the contribution of local authorities to the development of the blue economy

The presentation emphasised that data already exists for the blue and green economy, but that there is considerable overlap of tools. An important observation was the intrinsic connectivity between these two economies. A study carried out by CASE revealed various obstacles to promoting sustainability in the blue economy, including the availability of data at an appropriate level and their accessibility, as well as the need to adopt a narrative approach to make this information accessible to non-specialists and to facilitate its visualisation.

The rise of new activities, such as deep-sea mining, underlines the growing need to develop measurement and monitoring methods specific to these emerging fields. This development highlights the need to create sufficient mechanisms to understand these emerging practices and assess their impact on the sustainability of the blue economy.

Tourism has also received special attention. This sector plays an important role in the Mediterranean, and is very tangible in terms of measuring the sustainability of the Mediterranean

blue economy as a number of indicators is already in place. New measures could be introduced by local and regional authorities, such as limiting tourist numbers, as tested in Venice.

The need for indicators specifically tailored to Mediterranean countries was also highlighted, underlining the need for a gradual approach in view of persistent funding difficulties. A bottom-up approach would enable measures to be better adapted to the realities of each territory, while recognising the financial challenges facing these regions. The importance of raising awareness among institutions, governments and citizens was stressed. Involvement of authorities and stakeholders, and creation of synergies between them, were highlighted as key to progressing towards a sustainable blue economy in the Mediterranean region.

During the discussion, emphasis was placed on the types of indicators or actions needed to effectively involve stakeholders. One suggestion highlighted the potential of EU-funded projects to involve stakeholders. The suggestion was made to involve them through promotional materials that could effectively communicate project objectives and results.

In addition, as part of Plan Bleu's potential secondary activities, an information campaign was suggested to keep stakeholders informed and involved. The aim of this approach would be to keep them involved and aware. The importance of indicators that tell a compelling story was emphasised, particularly for communication purposes. The suggestion was made to use indicators that are thought-provoking and encourage responses, such as asking stakeholders what value they place on their coasts, or whether they observe pollution along their shores. This narrative approach is seen as a powerful way of engaging stakeholders on a global scale.

A strategic recommendation proposed the regular publication of communications by the Plan Bleu Observatory, potentially with a monthly presentation called "Map of the Month". This initiative would aim to disseminate information effectively and consistently, offering stakeholders valuable insights and updates on coastal and environmental issues.

4.2.5. Athens University of Economics and Business - Professor Phoebe Koundouri: on measuring transition to a sustainable blue economy and UNSDSN experience

The key question is what type of data needs to be collected:
"If you can't measure it, you can't manage it."

Professor Phoebe Koundouri presented the work carried out by the UNSDSN (United Nations Sustainable Development Solutions Network) and the Global Change Hub, focusing on data accessibility. In particular, an existing feature includes a dashboard illustrating the Sustainable Development Goals (SDG) footprint by company, driving more paths towards energy transition.

The discussion covered a wide range of systems requiring regulation, from land use to the marine and energy sectors. Particular emphasis was placed on maritime plans covering shipping, port infrastructure, coastal management and aquaculture.

To effectively measure the Sustainable Development Goals (SDGs), an annual reporting mechanism was introduced, operating at national, sub-national and trade chain levels. The presentation highlighted several platforms, including an online HUB serving as an observatory for the Mediterranean and Black Seas, projecting trends and developments to 2030. This interactive platform enables data to be retrieved and explored, improving accessibility and engagement. In addition, climate data platforms and digital applications were introduced, integrating geospatial and socio-economic data. Collaboration with the Intergovernmental Panel on Climate Change (IPCC) was also mentioned, particularly regarding atmospheric data. Land and ocean use pathways were detailed, focusing on their impact on food security, global security, land-use resilience and ecological preservation. In addition, the presentation addressed the acceleration of innovation to achieve climate neutrality, highlighting three drivers, two of which are specifically linked to the marine ecosystem.

4.2.6. Department of Economics, National and Kapodistrian University of Athens - Stella Tsani Associate Professor: on the employment dimensions of the blue economy and their measurement

The speaker set out the need to examine all potential locations and sectors for the development of a sustainable blue economy from an economic standpoint, but especially in relation to emerging activities, such as offshore infrastructure (e.g., wind) and potential deep-sea mining activities. Developers are expected to exploit the potential of these activities in the Mediterranean Basin, co-location and sustainability dimensions. These activities are not currently considered "sustainable": they therefore need to be regulated and controlled.

Socio-economic dimensions, particularly in terms of employment and gender, were identified as crucial to the sustainability of the blue economy. Emphasis was placed on the need to create good quality jobs, combining blue economy activities with environmental skills. An important aspect discussed was the need to develop a specific indicator measuring the inclusion of women in these sectors. This goes beyond simply collecting quantitative data; it involves identifying robust and relevant data to assess the inclusion of women in the labour market associated with the blue economy. This also includes qualitative aspects such as skills, access to opportunities and the promotion of green jobs.

Revelations about the availability of data from organisations such as the IMF and the International Energy Agency highlight the importance of further exploration of this information. These findings underline the need to go beyond existing quantitative data and focus on more holistic and qualitative data to fully understand the impact and role of women in the development and sustainability of the blue economy, particularly in Mediterranean coastal regions.

Prof Tsani validated the approach of applying the Plan Bleu indicator framework, which will be produced from the scoping study, to a site such as the Ionian islands proposed by the authors. She also recommended expanding the framework to other pilot sites in the Aegean and regions such as the South-East Mediterranean (e.g., expand to Turkey, Cyprus), underlining the need for cross-border regional management and coordination.

4.2.7. EMEA - Yeganeh Farouheshfar: on the EMEA dashboard and what blue economy indicators are needed, and at what level

TRIS dashboard: https://research.euromed-economists.org/tris-dashboard/

The speaker presented the dashboard developed by EMEA: TRIS, an interactive mapping model, acts as a framework for policy responses to the medium- and long-term challenges facing our economies and societies, based on four pillars it aims to monitor and measure: transparent governance and accountability; responsible living and social rights; inclusive and productive economies; sustainable energy and environment strategies.

Data is collected on various platforms. The indicators developed, which are not specific to the blue economy, can be used by companies to assess their carbon footprint. Before developing a data dashboard we need to clarify the main purpose of the data visualisation tool. Data can be collected at different levels:

- Governance: for example surface of marine protected area, different blue economy policies in place, etc
- Nature's evolution: for example coral reefs health, DNA biomass, …
- Industry level: energy and water consumption, chemicals used, carbon emission, waste production, …

Regarding the financing of the blue economy and restoring nature, it was pointed out that there are many existing funds and that the development of an indicator showing which potential funds to target would be useful for businesses. These funds are mainly used for mitigation, but the speaker expressed the wish to transform the economy. Investment in transformative projects is a major challenge due to the innovative nature of them.
A warning was issued about "blue washing" and the urgent need to avoid it via careful definition of Blue economy KPIs.

4.2.8. Stratégies Mer et Littoral - Frédérick Herpers: on integrated maritime and coastal policies and the need for indicators.

The speaker stressed the need to regulate in a sector-specific manner, while developing connections with cross-cutting policies to ensure sustainable growth in the maritime sectors. The concept of the blue economy is linked to the integrated maritime policy, which aims to ensure the integration of activities to ensure their sustainable development. Before the term "Blue Economy" was used, reference was made to blue growth, which focused primarily on job creation and the development of marine activities in the Mediterranean basin.
When it comes to indicators, the close interconnection between the sea and coast was highlighted, underlining the need to develop measures that take this land-sea relationship into account. To achieve an integrated approach in various territories, three pillars were presented for the development of relevant indicators: economic value, employment (notably through the development of "blue skills"), non-economic activities such as research and education contributing to job creation, and institutions.

The importance of providing these indicators with a high degree of integration capacity was emphasised, which means that they need to be robust in order to be adapted to different scales, from the micro-local level to that of the Mediterranean Basin as a whole. In addition, the need to make this work on the blue economy accessible to elected representatives and policymakers and easy for them to understand was highlighted. Initiatives such as workshops and questionnaires were mentioned as ways of making these concepts easier to understand.

Finally, observatories were presented as key tools for regulating blue economy activities, offering continuous monitoring and assessment to ensure balanced and sustainable growth in this field.

4.2.9. IOC-UNESCO - Emma Heslop: overview of UNESCO's blue economy data collection initiatives with its Global Ocean Observing System

GOOS platform: https: //www.ocean-ops.org/board

The Global Ocean Observing System (GOOS) is co-sponsored by UNESCO-IOC, the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and the International Science Council (ISC), was presented as a key pillar of sustainable ocean observation. The *in situ* Global Ocean Observing System numbers over 8500 ocean observing platforms across 13 ocean observing networks, with some 84 countries contributing. There are also 12 BioEco ocean observing networks that are now strengthening. GOOS provides vital information on the status and changes in the ocean across physical, biogeochemical and biological/ecological realms through Essential Ocean Variables (EOVs). The main objective of the GOOS is to lead the ocean observing community and build partnerships for an integrated, responsive and sustained global ocean observing system.

In practice, the system involves many different platforms, from research vessels to commercial ships (ships of opportunity), moorings, drifting buoys, argo floats, ocean gliders, tide gauges, high frequency radars and even ocean animals (see the 2023 GOOS Report Card for a view of the system) taking observations. GOOS provides the framework and support to ensure the data are fit for purpose to meet international commitments to climate and biodiversity targets, weather applications and hazard warnings, and support climate adaptation climate and blue economy needs.. There is currently growing interest in intensifying these observations, we do not have sufficient coverage for key EOVs, there are urgent societal needs that require more intense observations and persistent gaps in the global system, for example in the tropics, polar areas, and deep ocean. However, data collection can be costly and so our approach should be focused, and measuring equipment and resources can be improved through new technology and greater cooperation. This means that data collection must be targeted, and the data required must be clearly defined by specific indicators and applications that meet societal needs, for example for marine heatwaves, habitat loss, species shifts and carbon budgets. In other words, the following fundamental question needs to be answered: "What data should be additionally collected and what monitoring measures should be implemented?" to ensure effective and efficient data collection.

The current GOOS Essential Ocean Variables (EOVs) could directly support some of the integrated indicators planned under the Plan Bleu initiative, especially in the biological and ecological space. Additionally GOOS has work underway to define baseline indicators that will be required by multiple stakeholders and collaboration with the Plan Blue work to identify the observations and indicators to support compound indicators for blue economy and society would be beneficial. The Mediterranean Basin was mentioned as an important pilot area for data collection in support of Plan Blue initiatives in a collaborative approach. The concentration of various economic and environmental activities in the region makes it an ideal location for collecting accurate and meaningful data, offering a major opportunity to fully harness the potential of GOOS in this specific area.

4.3 Session 2 - Inclusive stakeholder engagement

4.3.1. DG NEAR, European Commission - Frédéric Fourtune (Programme Manager, Environment, Water and Biodiversity) on EU support for regional programmes that facilitate the emergence of a Mediterranean blue economy

It was pointed out that the "blue economy" is a recent concept for DG NEAR, as until last year, all blue economy issues were classified under the green economy sector. DG NEAR has drawn on the experience of other donors and the Union for the Mediterranean, their main institutional partner in the Mediterranean.

The speaker presented EU regional cooperation initiatives that are currently being financed and implemented (e.g. in tourism, which accounts for 9.7% of GDP in southern Mediterranean countries, but which generates significant environmental degradation).

- The SwitchMed II project, worth €22 million and led by UNIDO in collaboration with UNEP, aims to **promote the circular economy in maritime activities**. It focuses on more resource-efficient production practices, particularly in seafood processing in Morocco and aquaculture in Tunisia. These initiatives are already demonstrating the positive impact of eco-innovative solutions on the environment and on businesses. At the same time, SwitchMed promotes the adoption of sustainable business models and offers political support. The lessons learned from this programme will not only benefit the eight participating countries, but will also serve as a model for other Mediterranean nations, turning challenges into opportunities.
- The IMAP MPA (Integrated Monitoring and Assessment Programme - Marine Protected Areas) project (€4 million), a UNEP-MAP project partly funded by DG NEAR, contributes to the achievement of good environmental status (GES) of the Mediterranean Sea and coasts in seven beneficiary countries (Algeria, Egypt, Israel, Lebanon, Libya, Morocco and Tunisia). The project has consolidated, integrated and strengthened the ecosystem approach (EcAp) for the management of Marine Protected Areas and their sustainable development through monitoring and assessment of environmental status in the Mediterranean in a comparative and integrated manner: improving national monitoring of biodiversity governance and policies, preparing and implementing management plans for MPAs and improving MPA management through targeted actions. This project ended last summer, but

since then, has been carried on through the SEMPA project (contribution agreement with UNEP).

- Part of the WES project (€9.5 million) aims to reduce pollution reaching the Mediterranean Sea, particularly plastic pollution. In concrete terms, this project aims to improve the efficient use of water in urban and rural areas. The WES project is being implemented through a service contract running from 2019 to 2024. Its follow-up (a four-year extension currently under development) will extend a number of ongoing activities, and place greater emphasis on the protection and restoration of land and marine biodiversity.
- The SAFEMED V project (€8 million, starting 1 April 2022, and expected to run for 72 months) sets out an action plan for maritime transport in southern and eastern Mediterranean countries (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia). The project's role is to provide technical assistance and capacity building at a national level, and is seen as essential in the wider context of implementing the EU Agenda for the Mediterranean and the maritime components of the Regional Transport Action Plan adopted by the Union for the Mediterranean (UfM). The project takes into account the progress made with its previous iterations (SAFEMED III and IV) and the improved cooperation between EMSA as the implementing body and the relevant public entities in the Mediterranean.
- The Blue Mediterranean Partnership is a new financial initiative designed to support investment in the blue economy sector in the Mediterranean. This partnership involves organisations such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), and the development banks of EU member states, along with other key financial institutions. This initiative will be implemented through the use of existing financial instruments of the European Union Directorate General for Neighbourhood Policy and Enlargement Negotiations (DG NEAR), including the European Investment Plan (EIP) and the European Fund for Sustainable Development (EFSD). These mixed financing and bank guarantee mechanisms will be used to support and stimulate investment in the Mediterranean blue economy. The decision to finance this new investment instrument dedicated to the blue economy is scheduled to be officially signed on the sidelines of the COP 28 conference. This initiative will require concrete indicators that reflect the Blue Economy in the region.

4.3.2. DG MARE, European Commission - Giacomo Petrucco (Environmental Economist) and Joint Research Centre (JRC), European Commission - Jordi Guillen (Researcher): on the EU Blue Economy Observatory

https://blue-economy-observatory.ec.europa.eu/blue-economy-indicators_en

The speakers pointed out that an EU report on the blue economy in 2023 led to the creation of a Blue Economy Observatory and a dashboard. This dashboard includes EU statistical data and estimates, defining sectoral sustainability indicators to measure progress towards sustainability in each country, based on the MSFD. The data, harmonised and published progressively, relate to specific sectors such as CO_2 emissions in fishing and aquaculture. The speakers stressed the need to incorporate qualitative indicators such as job quality, gender inclusion and employment impact.

This dashboard aims to be a benchmark for sustainability in EU countries. In conclusion, four main areas were identified to accelerate the transition to a sustainable blue economy: improving the governance framework, collaborating with stakeholders, filling gaps in technology and data knowledge, and increasing funding.

The speakers stressed the need to build skills and the workforce. Their ultimate goal for 2024 is to create an inclusive roadmap, expand the data and indicator base, take an integrated approach by considering land-sea interactions in catchment areas (as with fisheries and coastal tourism), and model ecosystem services.

4.3.3. UfM - Adriana Salazar Olivan (Sustainable Blue Economy Expert) : on UfM action to promote the blue economy

The speaker presented the UfM's work to measure and monitor progress over time towards the 2030 targets of the SDG agenda for the Mediterranean, the so called UfM 2030 GreenerMed Agenda. The UfM 2030 GreenerMed Agenda offers a structured regional framework which, by coordinating existing and future programmes, initiatives, and projects, fosters political and operational convergence around three common axis of work of the 43 member countries of the UfM. The GreenerMed 2030 Agenda baseline assessment, developed with data from 2020, serves as a reference point for measuring and tracking progress towards the agenda's goals by 2030.

Particular attention was paid to the development of the south-eastern Mediterranean in terms of data collection. The UfM has developed a Roadmap for the sustainable blue economy structured around the 10 priorities of the 2021 UfM Ministerial Declaration on Sustainable Blue Economy and giving priority to optimising existing resources and working together to achieve effective action. This document is considered an important reference in the region, providing an overview of current initiatives, common needs, opportunities for future funding, and avenues for short-, medium- and long-term cooperation. Finally, it was mentioned that an easy-to-handle results-based monitoring, reporting and evaluation system of the Roadmap/Ministerial is in place, underpinned by (inter alia) process and results indicators linked to (i.e.) financial support by priority, national policies implemented, etc. The importance of stakeholders in achieving a sustainable blue economy in and for the region was underlined.

4.3.4. GSO-BlueMed-Tunisia - Cherif Sammari: on Tunisia's needs to effectively monitor the sustainability of the blue economy

The speaker presented various documents: a sustainable strategy for the blue economy in 2020, which establishes the need to find another way of operating, a scoping report and a national observatory for the blue economy integrating climate change in 2022 and a roadmap, spearheaded by the World Bank, which is being developed for a new perception of the blue economy in Tunisia. In Tunisia, tourism-related activities account for 12% of GDP, fishing activities for 1% and other activities for 1%. These sectors are highly socially inclusive. With regard to fishing, indicators such as fishing methods and techniques have been proposed. For tourism, studies have been carried out

since 2015 on the impact of this activity on climate change. An indicator on water consumption and on the method of extraction (e.g. desalination) geared towards climate change, could be developed.

Tunisia is also involved in various H2020 and Horizon Europe projects, as well as in the SwitchMed project, which focuses on the development of aquaculture and protection of the marine environment. The project has a pilot site in the Monastir region.

The presentation raised the following questions:

- How can indicators be aligned?
- How can time-space discrepancies be managed, for example when it comes to the problem of pollution, which spreads over time?
- How can national indicators be brought into line with those of European and Mediterranean countries, or even the rest of the world, and compensate for the lack of data on certain countries?
- How can the threats to biodiversity in exports be measured? Is it in relation to sales? Should production be reduced to allow stocks to recover?

In response, various observatories exist in Tunisia, but there is as yet no expertise in compiling information and data to create indicators. The speaker pointed out that there are many indicators, so there is a potential need to reduce their number and rank them in order of priority.
Among the proposed pilot sites where the Plan Bleu indicator framework could be applied, the speaker highlighted the Gulf of Gabès, which offers a range of relevant data.

4.3.5. SwitchMed UNIDO - Roberta De Palma (Chief Technical Advisor): sharing UNIDO's experience with the blue economy

The implementation of the SwitchMed II project was presented for Tunisia. The focus was on fishing and aquaculture activities, essential to the country's food security.
Indicators have been proposed for these activities, such as:

- Feed conversion rate per unit of production in aquaculture;
- The rate of P release into the ecosystem;
- The proportion of fuel and renewable energy used in production;
- The percentage of juveniles, as this indicator defines the resilience of the activity;
- Feed composition in aquaculture (fish/algae feed);
- The circularity rate, i.e. the rate of conversion of biomass (e.g. production of collagen from fish) and the rate of recovery of secondary products (peptides, drugs, etc.). To implement this indicator, the volume of fish waste and fish processing needs to be captured;
- The activity's carbon footprint.

More generally, the introduction of these indicators requires the involvement of industrial research and governments, but above all a change in economic priorities. It was stressed that UNIDO could support Plan Bleu in implementing these relevant indicators.

4.3.6. WestMed National Hub Algeria - Samir Grimes: on the Hub's Blue Economy Programme

The speaker presented Algeria's national blue economy strategy, based on an observation system for integrated coastal zone management. In concrete terms, this document prioritises activities and anticipates the intense development of blue economy activities in coastal areas (such as fishing and aquaculture, maritime spatial planning), while preserving Algeria's natural marine resources.
The ENSSMAL barometer produces collaborative vulnerability maps based on biodiversity inventories and statistical data to determine the value-added potential linking biodiversity and marine activities at a national level.
Vulnerability maps are created from indices, but it was emphasised that integrated blue economy indices are needed (e.g. biological, climatic, resource forcing). He also proposed a system for weighting the indexes according to national priorities so that the framework can be adapted to all countries in the Mediterranean Basin. This suggestion can be taken up at another workshop.
Biodiversity has been identified as a key issue, but it involves several challenges. Information is sometimes confidential, and there is a disconnect between competition and collaboration, as well as between individualism and data sharing in the development of indicators.
With regard to maritime spatial planning, the need to talk about maritime arbitration spaces for protection areas was highlighted as a fundamental instrument for cooperation in blue economy activities.

The speaker focused on education (summer classes) and training, presenting various workshops that educate citizens, technicians and elected officials about the cohabitation of marine activities and its challenges.
Key issues for the implementation of a sustainable blue economy were recalled:

- What is the added value of blue economy indicators?
- What is being measured, and for what purpose?
- Who does the reporting? Who is responsible?

4.3.7. BusinessMed - Mahdi Khomsi: on business opportunities and centres/tools for measuring the blue economy

During this presentation, the need to also work on a meso scale arose, particularly in terms of identifying facilitators and types of technical capabilities, for instance. The issue of calculating the carbon footprint of the private sector was raised. Businesses need tools to help them calculate this figure, in order to gain access to dedicated financing. It was also indicated that the development of activities could be based on the observatories already in place.

The speaker underlined BusinessMed's participation in the "Restore our Ocean and Waters" Mission, with which links could be explored. Specifically, the BlueMissionMed Coordination and Support Action (CSA) will design, structure and support a well-functioning basin scale innovation ecosystem, ensuring fast progress towards the achievement of Mission "Restore Our Oceans and Waters by 2030" objectives and important impact on the society. This EU mission aims to restore

healthy oceans and waters by 2030 through research, innovation, citizen engagement and investment. The mission takes a holistic approach, considering the ocean and waters as an interconnected system, playing a crucial role in achieving climate neutrality and restoring nature. One of its missions is to develop a sustainable and innovative blue economy. The mission is part of the European Green Deal and will deploy innovative solutions on the scale of marine and river basins.

5. Discussions and outcomes of the workshop

Develop relevant sustainability indicators adapted to all contexts in Mediterranean countries:
Participants pointed out that the Mediterranean is vast, and that there are major disparities between the North and South when it comes to the collection and availability of data already gathered from the Mediterranean Basin. Some are not freely available, do not cover the right time scale, or are simply not collected.
With regard to monitoring the sustainability of this sector, participants noted that the question "What do we want to measure?" is the first step in determining the relevance and number of indicators. These indicators can be either sector-specific (i.e. covering a specific sector of the blue economy) or cross-sectoral (covering several or all sectors of the blue economy). Another challenge is to answer the following questions: "What types of indicators are specifically linked to sustainability? At what point can we say "this activity is sustainable"? The workshop therefore highlighted the need to establish a definition of a sustainability threshold, which is subjective when it comes to human activities.

Examples of indicators suggested during the workshop - to be approved:

Sectors	Indicators
Fisheries and aquaculture	• Fishing methods (small-scale or large-scale) and techniques. • Percentage of fish landed with catch certificates. • Changes in direct sales at fish markets. • Percentage of juveniles (to determine stock recovery rate). • Percentage of overexploited stocks. • Percentage of phosphorus released into ecosystems • Percentage of secondary products reused and recovered (for medical or cosmetic purposes, for example).
Tourism and leisure activities	• Number of litres of water consumed per person. • Jobs as a percentage of the country's total. • Percentage of mooring areas equipped to prevent anchoring. • Percentage of marinas certified as Clean Ports by the European Union. • Percentage of tourist areas with entry restrictions.
Energy and Marine renewable energy	• Percentage of instances of shared connections developed for commercial plants • Percentage of co-activity experiments within marine energy plants (e.g. fishing, aquaculture, etc.). • Number of desalination units.
Maritime transport	• Volume of cargo traffic. • Volume of passenger traffic.
Cross-cutting indicators	• Percentage of coastal and seabed development (for tourism, ports, marine energies, aquaculture, etc.). As a reminder, land development is the main cause of biodiversity erosion. • Use of marine renewable energies. • Carbon footprint of the business sector. • Carbon sequestration rate. • Percentage of women and marginalised people hired • Percentage of plastic recycling. • Number of marine protected areas. • Management level of effort.

Engage stakeholders and foster collaboration between them:

The workshop also re-emphasised the need to engage stakeholders and foster collaboration towards a sustainable blue economy in the Mediterranean. This can be achieved through popularisation, communication and education, through numerous workshops, questionnaires and a communication plan, for instance. Participants stressed the need for their work to be easily understood by elected representatives, policymakers and civil society. For example, Algeria has developed its National Strategy for the Blue Economy (SNEB). This will guide the actions of the government, its partners and civil society up to 2030 in the maritime and coastal fields, on the conditions of use, regulation and management of these areas.

Develop and promote funds to finance the Mediterranean blue economy:

Participants also expressed the need to develop funds for financing the blue economy, but also to share them and make them known to all companies that might be interested.

Implement on pilot sites:

Finally, ideas for pilot sites to make the blue economy sustainable were suggested: the Ionian Islands in Greece, the town of Palamos in Spain, the Pelagos sanctuary, the city of Nice in the French Riviera, the island of Zembra and the Gulf of Gabès in Tunisia. These sites are major tourist and fishing centres, with a high level of land development and rich biodiversity. They also have a large amount of existing data, making them easy to monitor.

Recommendations - conclusions:

In conclusion, as underlined by Lina Tode (Plan Bleu), the constructive feedback from the scoping study paves the way for more detailed and in-depth work. The development of a committed community underlines the desire to perfect the conceptual framework and begin its implementation. The defined geographical areas offer solid anchor points for future application, while the proposed activities broaden the scope of Plan Bleu, reinforcing future blue economy initiatives. Taken together, these factors point to a promising future for the development and implementation of this framework (to be implemented in 2024-2025).

6. Appendices

6.1 List of participants

NAME	SURNAME	REPRESENTATION
Amine	Khadidja	Plan Bleu
De Fommervault	Orens	ocean-ops
Farouheshfar	Yeganeh	EMEA
Fosse	Jeremie	eco-UNION
Gallon	Susan	MedPan
Grange	Roxane	Plan Bleu
Heslop	Emma	COI-UNESCO
Idoux	Julie	DIRM (Interregional Directorate of the Sea - France
Khomsi	Mahdi	BusinessMed
Lafitte	Antoine	Plan Bleu
Lamine	Emna	Oceanogami
Lockerbie	Emma	UNEP - WCMC
McOwen	Chris	UNEP - WCMC
Perez	Sophie	Lab'homere
Rhatoussi	Nadia	Consulat du Maroc à Marseille
Richard	Pascal	Université de Toulon
Tode	Lina	Plan Bleu
Tsakas	Constantin	Plan Bleu
Zubel	Karolina	CASE