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Agenda item 6: Preparation of MAP Assessment Studies on the Interactions between Environment and Development**Revised Draft Roadmap for the MED2050 Foresight Study**

Note by the Secretariat

The MAP Mid-Term Strategy (MTS) 2016-2021 reiterates the objective "*to deliver knowledge-based assessments of the Mediterranean environment and scenario development for informed decision-making and stakeholder work*" (Decision IG.22/1). To implement this decision, the Contracting Parties to the Barcelona Convention included in the MAP Programme of Work and Budget 2016–2017 the development of a "roadmap for the preparation of the MED2050 report" (Decision IG.22/20).

The draft MED2050 Roadmap was presented and discussed during the Meeting of Plan Bleu Focal Points (April 2017), the 17th Meeting of the MCSD (July 2017) and the Meeting of the MAP Focal Points (September 2017). The MCSD Members and Plan Bleu Focal Points expressed support for the preparation and implementation of MED2050 on the basis of the proposed roadmap. The MAP Focal Points requested additional information on synergy with other activities and on planning and budget. A revised roadmap was presented to COP 20 (December 2017). The Contracting Parties welcomed this roadmap, adopted Phase I and requested the Secretariat (Plan Bleu) to present the progress of Phase I during COP 21 to enable them to provide guidance for Phase II (Decision IG.23/4).

The revised draft roadmap for MED2050 foresight study presents the actions carried out in 2018–2019 and seeks to deepen the methodological proposals for the implementation of successive phases, with particular emphasis on the arrangements for the participation of partners and the joint development of scenarios.

The present revised roadmap is divided into five sections. The first section presents the agenda of MED2050. The second section summarizes the conclusions and gaps identified in the benchmark study. The third section presents the guidelines for MED2050 and specifies what was done in Phase I (2018–2019) and what is proposed for Phase II (2020–2021). The fourth section reports on the mobilization of financial resources and the fifth section presents the expected conclusions and outputs.

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Revised Draft Roadmap for the MED2050 Foresight Study

1. Since the late 1970's, Mediterranean countries have decided to cooperate to put "*at the disposal of political leaders and decision-makers all information that will enable them to develop plans likely to ensure sustained optimal socio-economic development without degrading the environment*" and help "*governments of coastal states in the Mediterranean region to increase their knowledge of the joint problems they have to face, both in the Mediterranean Sea and in their coastal areas*" (UNEP/IG.5/7, 1977).
2. Within this context and in the framework of the implementation of article 4 of the Barcelona Convention and of the Mediterranean Strategy for Sustainable Development (MSSD), Plan Bleu/Regional Activity Centre (Plan Bleu) has been mandated with the "*preparation of analyses and prospective studies to assist in constructing visions of the future as an aid to decision-making*" and the "*dissemination of the findings of this work in the various appropriate forms and channels, including the regular publications of state of environment and development reports and environment and development outlook for the Mediterranean region*" (Decision IG.19/5, 2009).
3. Plan Bleu has coordinated and published two major foresight studies to date: "*Futures for the Mediterranean Basin: The Blue Plan*" (1989) and "*A sustainable future for the Mediterranean: The Blue Plan's Environment and Development Outlook*" (2005). Those reports have served as a reference to prepare environment and sustainable development policies in the Mediterranean, including the MSSD. They have supported regional, national and sectoral planning in various domains, and been cited hundreds of times. While they are now outdated and best used as historical references, decision-makers and experts continue to request Plan Bleu with information drawn from those reports given the lack of work fulfilling the same objectives.
4. The MAP Mid-Term Strategy (MTS) 2016-2021 reiterates the objective "*to deliver knowledge-based assessments of the Mediterranean environment and scenario development for informed decision-making and stakeholder work*" (Decision IG.22/1). To implement this decision, Contracting Parties to the Barcelona Convention included in the MAP Programme of Work and Budget 2016-2017 the development of "*a roadmap for the preparation of MED2050 report*", as the Main Activity 1.4.1.3 (Decision IG.22/20).
5. To prepare such roadmap, Plan Bleu organized an expert workshop (December 2016), conducted a benchmark study on the strengths, weaknesses and gaps of 35 recent foresight studies in the Mediterranean region, and consulted with national representatives and experts. The Draft MED2050 Roadmap was presented and discussed at the meeting of Plan Bleu Focal Points (April 2017), the 17th Meeting of the Mediterranean Commission on Sustainable Development (MCSD) (July 2017) and the Meeting of the MAP Focal Points (September 2017). Plan Bleu Focal Points and MCSD Members expressed support for the preparation and implementation of MED2050 on the basis of the proposed roadmap. MAP Focal Points requested further information on synergies with other activities, planning and budget. A roadmap revised on this basis was presented to the Contracting Parties at their 20th Ordinary Meeting (COP 20), in December 2017, Tirana, Albania. The Contracting Parties welcomed this roadmap, adopted its Phase I, and requested the Secretariat (Plan Bleu) to present the progress of Phase I at COP 21 to enable them to provide guidance for Phase II (Decision IG 23/4). This involves preparing a revised roadmap for Phase II.
6. As part of the implementation of Decision IG.23/4, Plan Bleu has been working to build the foresight network that will bring MED2050 to life throughout the project. A workshop was organized in April 2018. Plan Bleu presented the objectives and challenges of MED2050 at the International

Conference "Environment and development in the Mediterranean yesterday, today, tomorrow" on the occasion of its 40th anniversary (5 June 2018, Paris, France). A mapping of interested foresight actors and the design of participation methods are in progress.

7. The present revised roadmap is divided into five sections. The first section presents the agenda of MED2050. The second section summarizes the conclusions and gaps identified in the benchmark study. The third section presents the guidelines for MED2050 and specifies what was done in Phase I (biennium 2018–2019) and what is proposed for Phase II (biennium 2020–2021). The fourth section reports on the mobilization of financial resources and the fifth section presents the expected conclusions and outputs. MED2050 is organized into modules and each module has a section focusing on the methodology being proposed to ensure that the MED2050 initiative is open and consultative (annex IV).

Box 1: Supporting environment and sustainable development policies through foresight

Foresight is defined as “A systematic, participatory and multi-disciplinary approach to explore mid- to long-term futures and drivers of change” (A Glossary of Terms commonly used in Futures Studies, Forward Thinking Platform, 2014). Participatory strategic foresight relies on three components: (i) Futures analysis: forecasting, forward thinking, prospective, etc.; (ii) Planning: strategic analysis and priority setting; and (iii) Networking: participation and dialogue. The proposed MED2050 roadmap follows those three principles.

Foresight exercises can support public and private decision making in a number of ways:

- *Planning*. Foresight helps decision-makers identify successive priorities across a long time- period. Considering long-term horizons is critical in environmental policies. It helps decision- makers plan for structural changes, identify mid-term transitions and short-term investments required to get on the path of a desirable future.
- *Awareness raising*. Foresight analyses raise awareness on emerging challenges and opportunities associated with environmental changes. They are crucial for example to take stock of risks, impacts, necessary evolutions and opportunities associated with climate change.
- *Integration*. Foresight integrates economic, social and environmental factors, breaking down barriers across specialties and sectoral actions, in a multi-disciplinary and systemic approach.
- *Economic efficiency*. Foresight exercises help decision-makers improve economic efficiency by identifying strategic investments in prevention measures early enough to avoid facing major reparation or relocation costs at a later stage.
- *Evaluation*. Foresight exercises help understand whether policies already in place or decided on are sufficient to reach environmental and sustainable development goals, e.g. Sustainable Development Goals (SDGs).
- *Mobilization and dialogue*. Foresight helps mobilize decision-makers and stakeholders across geographical and institutional boundaries. It helps build dialogues, partnerships, and shared visions on desirable futures and critical decisions.
- *Communication*. Foresight exercises can be a powerful vehicle to communicate on priorities, challenges, individual and collective responsibilities. They set the light on institutions and processes addressing them.

I. Timing for a Foresight Study on the Environment and Development in the Mediterranean at the horizon 2050 (MED2050)

8. Preparatory activities (benchmark, expert workshops, and stakeholder consultations) established that a new foresight on environment and development was necessary in the Mediterranean, and provided insight on how this exercise should be shaped to fill gaps and facilitate decision-making in the next decade, while building on existing knowledge and resources.

9. There are five major reasons for implementing MED2050:

i. The first reason is the transformation of Mediterranean context. With the Arab springs, acceleration of climate change, oil counter-shock, national, regional and global geopolitical upheavals, the situation has evolved drastically since MAP last foresight exercise published in 2005. It is essential to take into account these dynamics in a new foresight exercise at horizon 2050.

ii. The second reason is the choice of a longer horizon. A 2050 perspective allows to consider long-term issues, such as climate change, possible ecosystem disruptions and their economic and social outcomes, and identify necessary (economic or ecological) transitions.

iii. The third reason is the will to include a section focused on the sea. In line with Barcelona Convention and MAP concerns, this exercise proposes to put the sea and maritime economy upstream of the thought process, considering the sea as a systemic framework.

iv. The fourth reason is the use of all foresight assets, going beyond forward anticipation. MED2050 exercise will reveal the trends but also possible disruptions through the analysis of weak signals, dialogue among actors with contrasting visions of the future, co-construction of a consensus on what is collectively desirable, and evaluation and construction of transition paths, in a context of uncertainty, to achieve shared objectives.

v. The fifth reason is the will to turn this participatory exercise into a communication and mobilization tool for decision-makers, general public and media. MED2050 not only proposes to produce a specific study, but also to put MAP at heart of public debate on the future of the Mediterranean region.

10. MED2050 is proposing the creation of a dynamic science-policy interface, based both on scientific data and on contrasting visions provided by policy-makers, experts or members of civil society, in order to collaborate towards the transitions required to achieve common goals. "Science is key to success: all action and policy development at the national or regional level must rely on a strong evidence base. The analytical tools that will allow for the forecasting, planning and assessment of sustainable development-related impact and action need to be developed with the scientific community, which itself needs to direct its research capacity in support of decision-making" (MSSD).

II. Benchmark study: findings and identified gaps

11. A benchmark study was conducted in preparation for MED2050. 35 studies and foresight exercises carried out over the last fifteen years at the scale of the whole or a significant part of the basin, on environment and development issues, were selected and analysed. Exercises ongoing or planned have also been identified and taken into account. The benchmark full report was published in December 2017 and is available on Plan Bleu website¹.

¹ <http://planbleu.org/en/publications/to-a-new-prospective-exercise-on-the-environment-and-the-developments-in>

12. The study identified gaps in the content and methods of existing analyses:

- Gaps in the content of these exercises: relatively short time frames (very little work whose focus extends beyond 2030); disruptors and weak signals are rarely explored; the sea is seldom considered on the scale of the Mediterranean region; and ecosystems and Mediterranean maritime space are not central to research (with the exception of MED TRENDS, led by WWF with Plan Bleu's support). The state of the environment is only considered as an effect of socioeconomic changes (downstream), rather than as a factor that can affect those changes. The opportunities associated with a transition towards a blue economy are not considered. Very little of the work undertaken takes into account the variety of subregions in the Mediterranean region, which decreases the political impact of the studies and their relevance for countries in the Mediterranean basin.

- Gaps in methodology: "forecasting" approaches are preferred over "backcasting". As a result, the recommendations made are not particularly effective. Experts often work within a small circle, which provides little space for the participation of stakeholders (including States, local authorities, businesses and associations). Communication to the public, the media and decision-makers is weak.

13. MED2050 will incorporate both the achievements made and lessons learned from these past experiences.

III. Key directions for MED2050

14. All the preparatory work carried out by the Secretariat (Plan Bleu) since 2016 has made it possible to draw up the main guidelines for the MED2050 exercise, which differs from the essentially quantitative 2005 foresight study carried out by experts and which focused on the environmental impact of the major socioeconomic trends expected over the medium term (2025). This difference is reflected in seven key directions:

i. The choice of a long term 2050 horizon - with an intermediate horizon at 2030 (corresponding to the SDGs).

ii. A balance between quantitative and qualitative approaches. Combining intelligent use of existing trend information (notably, but not only, available in the 2019 State of the Environment and Development Report) with a more qualitative analysis of disruptions and weak signals. The statistical concern will therefore be present, but the project intends not to be too complex or too intensive in data.

iii. Taking into account climate change in a more systemic perspective, allowing to integrate the consequences in return of climate change on ecosystems as well as on the economy, agriculture, lifestyles, migrations, urbanization, energy policies, etc.

iv. An important place given to the prospective of the sea, not central to the 2005 foresight report. This will suppose differentiating a scientific work on the changes in the marine ecosystem articulated with a more global perspective of the Mediterranean region. The prospects for the blue economy will be taken into account in this context.

v. An open, participatory foresight, allowing to structure a dialogue between the various Mediterranean countries and to involve the relevant stakeholders and the civil society. MED2050 will support the documentation of contrasting visions of the Mediterranean future. It will acknowledge that countries and stakeholders start from different situations and viewpoints, and help co-construct shared objectives in the medium and long term.

vi. A more strategic foresight to co-design transition paths rooted in reality and operational. Transition paths will take into account both the regional heterogeneity of the Mediterranean and the different temporalities. The central question to which the prospective must be able to answer is indeed not what will be the future in 2050, but that of transitions: how to move from current situations and crises to medium-term action plans and long-term objectives? MED2050 will thus make an important contribution to the MSSD review.

vii. A much bigger investment in communication. The results of this work, even at intermediate stages, will be made more accessible to the different interested publics – from specialists to citizens. To do this, a reflection on the coherent and interactive communication strategy was conducted from the start of MED2050 design phase.

15. The MED2050 roadmap was revised on the basis of decision IG.22/04, which encompasses Phase I, and the consultations conducted in 2018-2019 with decision-makers and other stakeholders, including Plan Bleu Focal Points, who have highlighted the following needs:

- The involvement and continuous information of national Focal Points and local stakeholders;
- Sharing of experiences and good practices (e.g. using the web platform);
- Integrating, into MED2050, more capitalization, skills development and training;
- Adopting a participatory process to build a shared vision of the future, based on national exercises and visions, incorporating lessons learned and other elements from existing exercises and reports, and mobilizing additional resources;
- Exploring synergies between MED2050 and recent or concomitant MAP and non-MAP activities.

16. The revised proposed roadmap is organized around four main activity modules (Module 1: Trends, ruptures and weak signals; Module 2: Comparing and sharing contrasting visions; Module 3: Designing scenarios; Module 4: Co-constructing transition strategies). Scientists and MAP experts are already or will be associated to all modules. A graph summarizing these components is presented in Annex I. A provisional schedule is given in Annex II.

17. Phase I of MED2050 corresponds to current activities and those carried out during the biennium 2018–2019 (mobilization of existing resources, creation of a network and a participation strategy, and completion of Module 1 on the evaluation of trends, disruptors and weak signals). Phase II of MED2050 corresponds to the activities planned during the biennium 2020–2021 (Modules 2 to 5, specified below and set out in detail in annex IV).

***Mobilizing existing resources and building a network on Mediterranean futures
(Phase I: 2018–2019)***

18. This step comes upstream of the successive modules described below. It has been the focus in 2018-2019 and will remain ongoing throughout the project.

19. In April 2018, a brainstorming workshop was held in Plan Bleu, aiming to frame the operationalization of MED2050 and to lay out the exercise under different options.

20. In June 2018, Plan Bleu organized an International Conference entitled "Environment and development in the Mediterranean, yesterday, today, tomorrow", co-organized with Serge Antoine Foundation, which brought together more than 130 participants, experts and policymakers from the Mediterranean countries, representatives of MAP components, national, European and international

institutions, and members of the civil society. Major trends in the Mediterranean were presented and discussed, with MED2050 objectives at the centre of the discussions.

21. Exchanges with several thematic networks took place, notably on the themes of the sea (towards a foresight of the Mediterranean Sea looking at long term horizons), the rural environment and agriculture, demography (contact established with a group of Mediterranean demographers, as well as with the network PROSPER, network of foresight managers for French public research, etc.).

22. Some activities are in progress and will be completed by the end of the 2018-2019 biennium: consultations with Mediterranean stakeholders, construction of the foresight network, drafting of the participation strategy, and mobilization of stakeholders.

23. Since the beginning of MED2050 exercise, the Secretariat, through its Plan Bleu, has consulted various Mediterranean stakeholders (Plan Bleu and MAP Focal Points, MCSD Members, MAP Partners and other stakeholders, experts, etc.), to identify national experiences, expectations, and interested parties to participate in MED2050 or to support regional, sub-regional or national workshops.

24. Many stakeholders expressed great interest in participating and being involved to varying degrees in MED2050 foresight network. The network is being set up and remains to be completed with new stakeholders, particularly in the South and East of the Mediterranean. Participation in the network is open and may evolve throughout the project depending on the development of themes and interests. This network is designed as a dynamic science-policy interface. It facilitates mobilization of existing resources, strengthens ongoing dialogue among stakeholders, and facilitates the uptake of research results in policy development.

25. Institutions and experts involved in recent and ongoing foresight studies in the Mediterranean, as well as relevant scientific networks and institutions were invited to participate. MAP and Plan Bleu Focal Points were also invited to participate and / or identify national participants and representatives. MAP components provide critical expertise and facilitate synergies with other MAP exercises.

26. More specifically, MED2050 network is composed of five distinct entities, each with a different and complementary composition, role, frequency of interaction and project intervention stages. These entities can be listed as follows: Plan Bleu team (in charge of MED2050 project, in close collaboration with other MAP entities), the scientific committee (in charge of ensuring the scientific coherence of the project results and whose members, recognized experts, will only meet on few occasions), the foresight group (having a fundamental production role throughout the project), groups assembled for specific workshops (to collect contrasting visions), and the wider network (at the heart of information exchange, that can be consulted on a timely basis, especially during Module 2 on contrasting visions). Network participants will exchange throughout MED2050 on the main results, analyses, points of view and questions, using in particular the web platform dedicated to MED2050 (Box 2). These different entities/groups and their roles are detailed in Annex 3.

Box 2: The MED2050 web platform, a strategic tool for thinking about the future of the Mediterranean Basin

The web platform dedicated to the initiative and the progress of the MED2050 project was created in June 2018. It will be further developed as the project advances. It is a place of experience and documents sharing (studies, events, written documents or videos...) to feed the reflection on the future of the Mediterranean basin by 2050. A "MED2050 logo" would give visibility to the MED2050 initiative and the work of partners who contribute to it directly or indirectly.

Methodological focus - Once further developed, the MED2050 platform would include:

- A space dedicated to the MED2050 initiative as such (with an introductory page on the project, its objectives, the successive modules, a relay to one or more specific consultation platforms, in particular to feed Module 2 on contrasting visions, and a more general work area with the possibility of posting comments, opinions, and ideas...).
- A space dedicated to foresight works at national and regional levels (with concrete case studies, testimonies...).
- A general space dedicated to the foresight tools and to their use (with a page on the *Imagine* method, examples of concrete cases set up according to this method...).

27. The participation strategy is also under discussion. MAP Phase II, adopted in 1995, states that "*information and public participation are essential dimensions of sustainable development and environmental protection*". At its 17th Meeting (Athens, Greece, 4-5 July 2017), the MCSD also called for greater attention to participatory approaches involving broader stakeholder consultations, including through the use of electronic tools (web platforms), in addition to the involvement of national governments (UNEP(DEPI)/MED WG.441/9). MED2050 will therefore rely on an innovative and efficient participation strategy, making the initiative open and collaborative.

28. A newsletter will also be developed by Plan Bleu and made available on the web platform. This newsletter will not focus solely on scientific results. It will leave room for questions, sharing of national, regional or international experiences, information on current projects, debate on future options and scenarios, etc. Successive newsletter articles on the same subject could be grouped and synthesized to produce thematic booklets. Possible thematic booklets will be reviewed by the scientific committee and disseminated widely. These intermediate products will contribute to the preparation of the final report, and will support the communication strategy by targeting a broader audience than the final report.

29. Calendar. The capitalization, consultation and setting up of the network have required particular attention in 2018–2019. Those activities will then be continued during the biennium 2020–2021, to take advantage of new developments and ensure ongoing dialogue among interested parties. Intermediary outputs will be presented to the various bodies of the MAP system.

Module 1: Assessing trends, disruptors and weak signals in a new Mediterranean context (Phase 1: 2018–2019)

30. This step corresponds to Module 1 of MED2050. Its implementation is underway with a synthesis report expected by the end of the 2018-2019 biennium. It focuses on main trends and the identification and analysis of disruptions and weak signals. It will target the most influential variables in the Mediterranean region, both quantitative and qualitative.

31. Module 1 is based on synergies with recent and ongoing MAP and non-MAP work to make efficient use of resources. Several works are feeding the trend analysis: the 2019 Report on the State of the Environment and Development in the Mediterranean (SoED 2019), the Shared Environmental Information System (SEIS), the Integrated Monitoring and Assessment Program (IMAP), the Mediterranean Sustainability Dashboard, the MedECC first assessment report (in preparation), etc.

32. Plan Bleu has commenced the development of a long-series database, the aim of which is to compare trends between the previous foresight report published in 2005 and actual trends.

Box 3: The SoED 2019 and the MedECC Assessment Report: Two Key Exercises on Module 1 of MED2050

The 2019 Report on the State of the Environment and Development in the Mediterranean (SoED 2019) takes stock of environment and development trends in the Mediterranean. Its publication is planned for 2020, and is the result of a collective effort of the Contracting Parties, MAP components, and many external partners.

The assessment report being prepared by the MedECC expert network on climate and environmental change in the Mediterranean will also make an essential contribution to MED2050, in particular to Module 1. Experts in this network are working on a systematic review of the scientific work on climate and environmental change in the Mediterranean and its impact for decision-makers. Since May 2018, Plan Bleu hosts MedECC scientific secretariat in the framework of a partnership with the Union for the Mediterranean.

33. To establish Module 1 of MED2050 on the evaluation of trends, disruptors and weak signals in a new Mediterranean context, Plan Bleu has formed a partnership with Labex Med, a programme of excellence for the promotion of interdisciplinary research into human and social science in the Mediterranean (see box 4).

Box 4: Plan Bleu / Labex Med Partnership

This partnership gives the opportunity to a postdoctoral researcher to work for one year in Plan Bleu. His/her work will rely in particular on studies identified in the benchmark study, as well as on the intermediate results of the SoED 2019 and MedECC assessment report.

The challenge at the heart of the partnership with the Labex Med is to go beyond disjoint sectoral or institutional analyses to understand the structuring trends in a systemic framework, ensuring the coherence of hypotheses and putting forward the interactions and interdependencies between the analyses. This partnership will also highlight disruption factors and weak signals, thus offering a more qualitative analysis to Module 1. The postdoctoral researcher will collaborate with several Labex Med thematic and transversal laboratories, Plan Bleu team and partners. The results of this work will be presented for discussion to the foresight group, and will lead to the production of a first MED2050 product: report on trends, disruptions and weak signals.

The science-policy interface being at the heart of Labex Med interests, MED2050 Module 1 is a unique opportunity for Plan Bleu to collaborate with research laboratories, create synergies, and base MED2050 on a scientifically recognized work, including in its interdisciplinary approach.

34. The foresight group will meet during a first plenary session in November 2019, to inform and complete the analyses resulting from SoED 2019, MedECC assessment report and the partnership with Labex Med.

Module 2: Sharing and comparison of contrasting visions across the Mediterranean (Phase II: 2020–2021)

35. This step corresponds to Module 2 of MED2050. Unlike most of the analyses identified by the benchmark study, MED2050 will not rely solely on expert work. Contracting Parties and stakeholders will be consulted on their visions for the future of the Mediterranean, with the aim of sharing potentially contrasting visions across the Mediterranean sub-regions. This approach will be consistent with the participation principle stated above.

36. Methodological Focus: The objective of Module 2 is to bring out and recognize differences in viewpoints and aspiration, thanks to a multi-country and multi-stakeholder qualitative approach. To prepare this module and make it representative and participatory, Plan Bleu seeks out and builds partnerships with existing networks and partners.

37. Two options are envisaged for the Module 2 implementation, depending on resources.

- Option 1: remote consultation of national and local experts and decision-makers, on their visions of the future of the Mediterranean. This option would allow to collect contrasting visions, although not reaching all the relevant stakeholders and not allowing for a real dialogue.
- Option 2: National and Sub-regional Workshops. Several prospective workshops would be organized in selected sub-regions to engage stakeholders (experts, policymakers, civil society) on their visions for the future of the Mediterranean basin. These workshops could be organized around the following points: discussion in working groups on the results of Module 1 (trends, disruptions, weak signals), joint foresight exercises allowing for the emergence of contrasting visions of the future, then sharing and consolidating these visions. This option would make it possible to reveal the specificities of sub-regional visions in the Mediterranean.

38. Under both options, Module 2 can be opened to a wider consultation relayed by network leaders. Questionnaires will be prepared, disseminated and analysed, using recognized foresight methods, through partnerships with existing network leaders and representative of the main stakeholders and issues in the Mediterranean, including interested MCSD Members.

39. Special attention will be given, in this context, to the prospective of the sea, if possible through a specific workshop. Foresight experts and specialists of the marine environment will be brought together to work and bring out contrasting visions of the future of the sea.

Module 3: Build framework scenarios using trends, disruptors and weak signals, and contrasting visions (Phase II: 2020–2021)

40. This step corresponds to Module 3 of MED2050. It will be based both on the results of Module 1 (trends, disruptions, and weak signals), and Module 2 (contrasting visions). The foresight group will be responsible for articulating the results of Modules 1 and 2 to take into account the different viewpoints between countries, sub-regions and stakeholders, identify common or convergent objectives, and build several contrasting scenarios on this basis. One of the scenarios will be chosen, the most realistic and the most desirable (consensual), in order to serve as a goal to pursue under Module 4 on transition paths.

Module 4: Co-creation of transition pathways and strategies in the short, medium and long term (Phase III: 2020–2021)

41. This step corresponds to Module 4 of MED2050. It will build on the three previous modules to co-construct concrete transition trajectories and strategies, bearing in mind the importance of temporalities and the articulation between long, medium and short terms. Agreeing on desirable or acceptable futures by 2050 (long-term) will make it possible to identify alternative transition strategies in the medium term (horizon 2030) and to make comparative assessments of their plausibility, as well as to put forward critical investments.

42. Module 4 will take stock of the obstacles, facilitating factors, opportunities and risks, to overcome difficulties towards the most desirable scenario selected at the end of Module 3.

43. MED2050 will take into account sub-regional heterogeneity. MED2050 thus directly intends to feed into future strategies and agendas, including the mid-term evaluation of the MSSD, as well as national and sectoral plans. MED2050 will help identify major obstacles and early responses when they are still achievable as well as opportunities to achieve a desirable future. It will help anticipate emergencies, avoid repair costs and maximize co-benefits.

44. One of the dimensions of transition pathways to a desirable future is the blue economy. The BlueBoatsMed initiative (Box 5) is used by Plan Bleu as a way to prefigure (test) future sectoral analyses on transitions.

Box 5: Potential for Synergy with the BlueBoatsMed Initiative on identifying transitions paths (Module 4 of MED2050)?

In the framework of MAP Programme of Work for 2018-2019, Plan Bleu continues to work on regional instruments for sustainable tourism, including possible guidelines, particularly in the areas of cruising and recreational boating. A set of ongoing projects could be part of this reflection which is also fed by the Regional Action Plan for Sustainable Consumption and Production, the Protocol on Integrated Coastal Zone Management, the SAP BIO and the Regional Plan on Marine Litter.

In 2019, Plan Bleu received support from the BlueMed Start-up Action initiative to organize a series of three workshops with experts. Those workshops will frame the perspectives of evolution of cruise and recreational boating sectors and their major impacts. The expert group will then identify promising innovations tackling each of these impacts. These innovations will be presented and discussed by the experts, who will assess together those that may have the potential to lever transitions towards more sustainable and inclusive sectors. The innovations highlighted by the BlueBoatsMed initiative, and the approach designed to identify potential transition levers, based on promising innovations, could fuel in MED2050 Module 4, and allow testing an innovative methodological approach.

IV. Mobilization of financial resources

45. A set of core activities – sufficient to produce the MED2050 report for COP 22 – will rely solely on technical partnerships, MTF funding and limited co-financing. The necessary co-financing for the first biennium has been mobilized. Additional or more ambitious activities require the mobilization of co-financing or complementary partnerships. Some responses to calls for projects brought together sociologists, economists, statisticians and modellers (including the setting up of a European research project focused on public policies and disruptive factors). Although not selected at the final stage (despite a preselection to the final phase), this ambitious mobilization of actors, and more generally all the work put in place to respond to this call for proposals could serve as a basis for another proposal. Financial partnerships remain to be built for an ambitious option on Modules 2 and 4, especially for activities in Mediterranean countries. Some funding streams are under discussion but remain to be completed.

46. The organization of MED2050 into modules and packages of activities will help to find additional funds associated with explicit activities and products. For example, development or investment banks (World Bank, European Investment Bank, African Development Bank, etc.) may be interested in obtaining benchmarks to design future investment strategies, by financing activities targeting transition trajectories and critical investments in the different parts of the Mediterranean basin. The presentation of the first MED2050 products should facilitate this mobilization for later phases.

47. Mediterranean countries may wish to organize and support sub-regional or national workshops. Bilateral or international donors will also be approached in collaboration with stakeholders to support workshops, knowledge development and technical assistance in Southern and Eastern Mediterranean countries, or detailed analyses of ecosystems and issues identified as priorities during the consultation (European Union, French Development Agency, etc.). Funding by the MTF and the official support from the Contracting Parties will allow for the establishment of such co-financing and partnerships, while ensuring that MED2050 products will feed into the specific

objective of the MAP Mid-Term Strategy 2016-2021 to deliver estimates based on knowledge of the Mediterranean environment and development scenarios, to support the work of policymakers and stakeholders.

V. Conclusion and expected outputs: dissemination of results, knowledge-building and capacity building

48. MED2050 will contribute to the visibility of the MAP – Barcelona Convention system by playing an active role in the capitalization and dissemination of its own results, as well as the conclusions of other relevant foresight studies, newsletters and summary booklets.

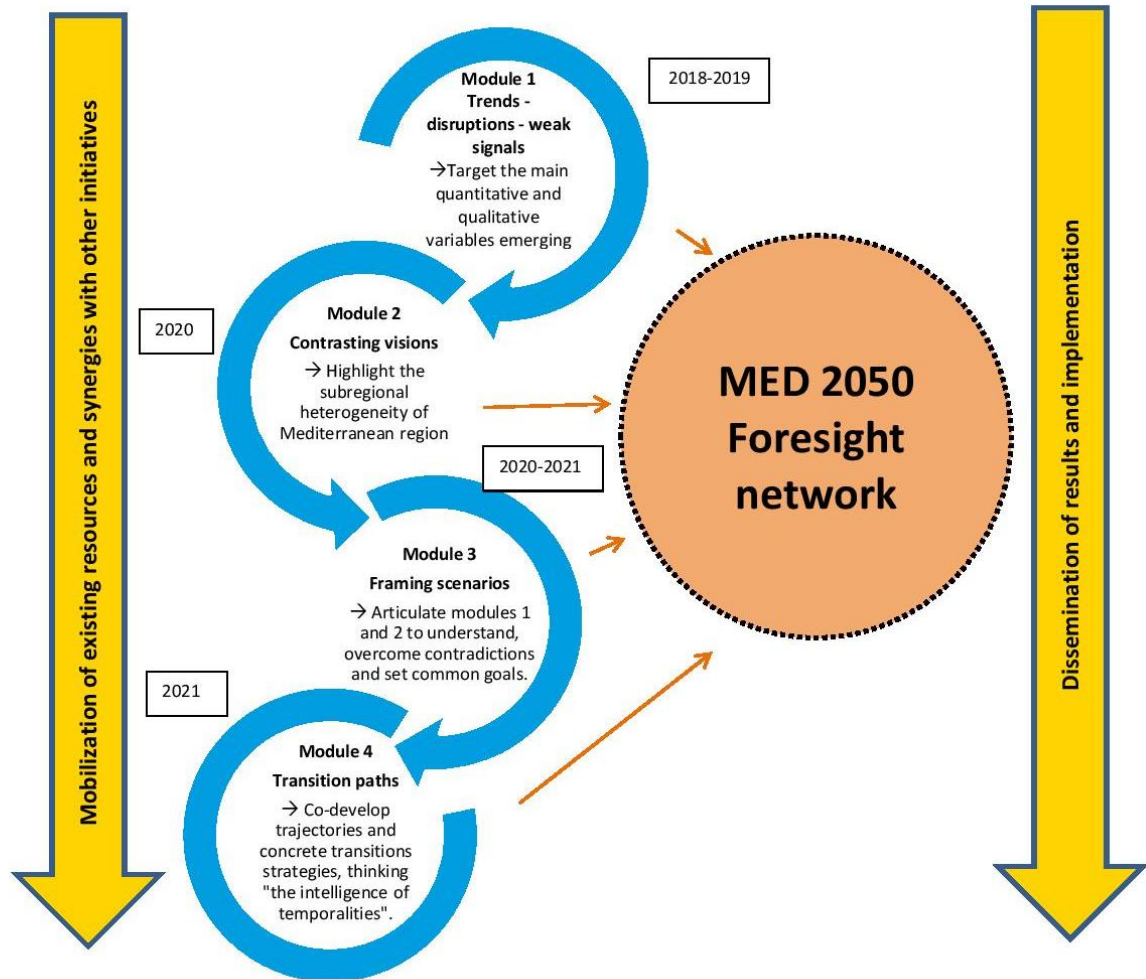
49. The chapters of the final report will be delivered in phases, with a chapter on trends in 2019, a chapter on visions in 2020 and a chapter on transition pathways and critical investments in 2021. The final report will be discussed by MAP system bodies in 2021 with a view to being presented to COP 22 in 2021 (Annex II).

50. Plan Bleu will carry out research into funding in collaboration with interested Contracting Parties at the national level to respond to national needs for technical assistance and will then present the MED2050 local-level results and assist with integrating them into foresight studies, strategies and action plans at the sub-regional, national and local levels. The web platform will also be mobilized as a strategic tool which will facilitate the dissemination of the MED2050 results.

51. Plan Bleu could produce a methodological guide to share experience and good practice on the development of a foresight exercise of this type. The methodological approach, aiming to bring together Mediterranean initiatives, could be applied on different scales within the Mediterranean and beyond the Mediterranean and could attract and nurture initiatives in other regional seas wishing to carry out similar large-scale participatory foresight studies. There is yet little foresight work of this type and there is strong demand for it, including demand from scientists for their involvement to be built into such exercises.

52. The coming decades will be decisive for resolving environmental problems, seizing emerging opportunities and paving the way for a prosperous and peaceful Mediterranean region, in which people enjoy a good quality of life and where sustainable development takes place within carrying capacities of healthy ecosystems. As a strategic and participatory foresight exercise, MED2050 will shed light on these critical stages.

Annex 1: Proposed components for MED2050



Annex 2: Provisional timetable for MED2050

	Timing	Consultation & transfer MAP System	Dialogue Workshops or webinars ²	Synergies, Mobilization of resources	Network	Publication Communication	Dissemination Technical assistance		
Realized	2016	T3			Key actors identification				
		T4		Foresight workshop		Benchmark Map of existing programs and products	Workshop report		
		T1							
		T2	Plan Bleu Focal Points						
	2017	T3	MCS D				Benchmark report		
		T4	COP 20	Foresight workshop			Workshop report		
		<hr/>							
		Potential	2018	T1		Consultation - Invitation to participate		Mobilization of resources, technical, institutional and financial partnerships	
T2	Foresight workshop								
T3	Foresight workshop								
T4	Launch of the network								
2019	T1								
	T2		Plan Bleu Focal Points			Workshop report			
	T3		MCS D						
	T4		COP 21	Workshop or webinar Trends & disruptions (Module 1)			Trends chapter		
2020	T1		Consultation on future scenarios	Workshop or webinar Sea, marine ecosystems (Module 2)			Newsletters ; thematic booklets		
	T2								
	T3			Subregional workshops Towards a shared vision (Module 2)					
	T4								
2021	T1		Workshop or webinar Co-develop framing scenarios (Module 3)			Report chapters			
	T2	Plan Bleu Focal Points							
	T3	MCS D							
	T4	COP 22	Workshop or webinar Co-construct transition pathways (Module 4)			Report	Dissemination through MAP network, institutional partners, media, general public		
						Capacity building, technical assistance (if funded)			

² Subject to corresponding financial mobilization.

Annex 3: Establishment of MED2050 network

	Composition	Role	Frequency of meetings	Intervention stage
Plan Bleu team	MED2050 team and MAP partners	MED2050 animation	Regular	All along the projet
Scientific committee	About 15 people Legitimacy Representativity	Scientific validation MED2050 « moral and scientific guarantee »	Twice (upstream of the project, and downstream for validation of work / results)	Upstream of Module 1 At the end of Module 4
Foresight group	15-20 people mobilized (Minimum 1/3 with foresight experience and 2/3 of thematic experts and other stakeholders, including PB/RAC and other RAC. Representativity	Production role	Regular	All along the project Above all : Module 3 // framing scenarios
Specific workshops	« Decentralization » of the foresight group <i>(Composition : experts more representative groups → depending of financial means)</i>	Bring out contrasting visions Start from countries situations A focus workshop on the sea, if financial means	Workshops 2/3 days per sub-region or 2 times 2/3 days (Or contrasting visions of national experts, depending on the means)	Module 2 // contrasting visions
Expanded network	Informal network. Representativity (regarding countries, organisms)	Exchange of information / consultation / resource center / ability to post documents / strategic watch	Active continuously via the platform (to be revitalized on the new website) One-off consultations	One-off consultations // Module 2 All along the project and after (strategic watch // newsletters // thematic booklets // exchange of information)

Annex 4: Modules, participation strategy and methodological elements

	Modules	Who participates in this step?	Methodological elements
1	Trends – disruptions – weak signals	RED 2019 team MedECC network Post-doc, in partnership with LabexMed. Plan Bleu team and MAP Foresight group Expanded network	Post-doctorate: trend analysis in connection with the PB/RAC team, and more qualitative work on disruptions and weak signals Foresight group: first meeting in November 2019 to work in groups on this module
2	Contrasting visions	Workgroups in specific workshops (decentralized foresight groups) (<i>ou just experts if lack of financial means</i>) Plan Bleu team and MAP partners Expanded network , especially by using a relay through partner network heads // one-off consultations	Hypothesis 1: remote consultation of national and local experts and decision makers to bring their visions of the future of the basin Hypothesis 2: National and Subregional Workshops Whatever the hypothesis adopted: wider consultation relayed by network heads, and, depending on the budget, specialized workshop on sea foresight
3	Framing scenarios	Foresight group Plan Bleu team and MAP partners Expanded network	The foresight group articulates results of Modules 1 and 2 in order to take into account the differences of points of view and aspirations, to build several contrasted scenarios and to retain the most realistic and desirable one
4	Transition paths	Foresight group with increased participation of actors (institutional, associations, civil society, donors) Plan Bleu team and MAP partners Expanded network	The foresight group and the actors participating in this module prioritize obstacles, favorable factors, opportunities and risks to be overcome in order to reach the shared objectives, and to build concrete and realistic paths of transition (including investments and critical measures)
All along the projet	Dissemination of results and implementation	Plan Bleu team and MAP partners Foresight Group Expanded network	Key role of MED2050 web platform throughout the project: place of exchange, sharing of practices and experiences, information mutualization etc. One of the potential final outputs: methodological guide on setting up a participatory prospective exercise as MED2050

Annex 5: Synergies with other MAP initiatives and activities

