

Workshop 3

Environment and Sustainable Development

PREPATORY REPORT

Regional Cooperation and Territorial Approaches on Environmental Issues in the Mediterranean – The Plan Bleu's role

Julien Le Tellier, programme officer
On behalf of Hugues Ravenel, Director of Plan Bleu

Plan Bleu -UNEP/MAP
15, rue Ludwig Van Beethoven
06560 Valbonne, France
Website: www.planbleu.org

Acknowledgements: This paper is made of several Plan Bleu's publications (see details in the list of bibliographic references at the end of the text).

INTRODUCTION

On the one hand, the ecology of the Mediterranean Basin is rich and complex; the stakes of sustainable development are crucial in the region. The natural environment is subject to pressures from tourism, urban sprawl along its coasts, irrigated agriculture, unmanaged mountainous areas, overfishing, intercontinental maritime transport... These pressures are heavy on such limited and vulnerable resources as water, natural coastal zones and the marine environment.

On the other hand, the Mediterranean region is complex in its socio-political dimensions. The Mediterranean brings together countries with various development levels and patterns, as well as different political models (schools) and democracy (freedom) levels. The Mediterranean Basin is an area of convergence and competition; the *Mare Nostrum* both unites and separates North, South and East sides of the Basin. The idea of 'common future and challenges' induces the need for regional cooperation and for policies of integration.

In this context, the Barcelona Convention, supported by the Mediterranean Action Plan (MAP) and the Additional Protocols, under the auspices of the United Nations Environment Programme (UNEP), represents tools fostering regional integration. For over 30 years and within a context of growing international action for the environment, the 21 States bordering on the Mediterranean¹ and the European Commission (EC) have together been developing an original mechanism for environmental regional cooperation in the framework of the UNEP/MAP.

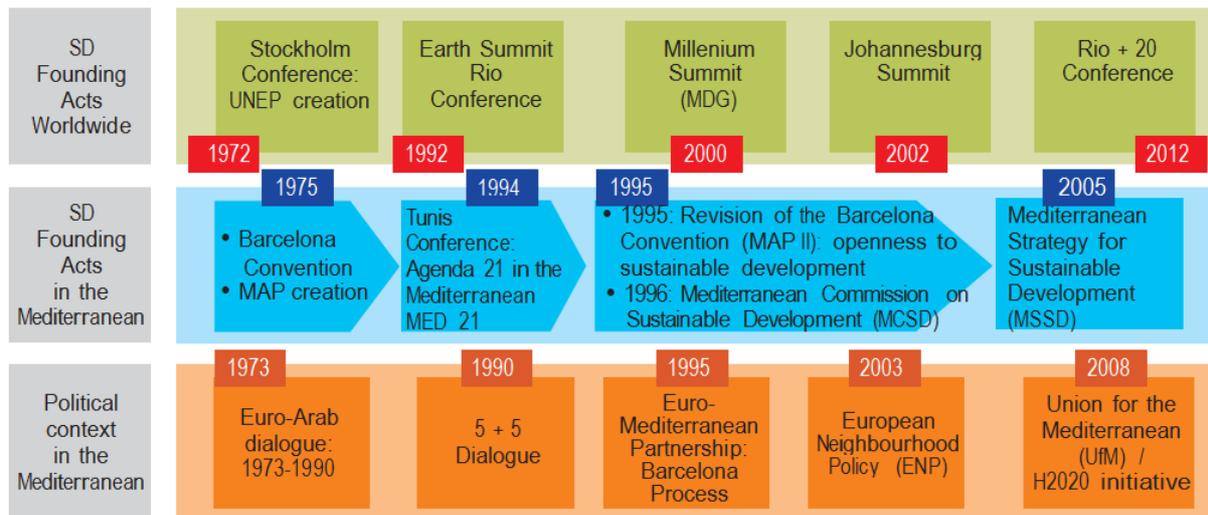
As one of the oldest UNEP/MAP Regional Activity Centre (RAC), the Plan Bleu is involved in the Mediterranean cooperation. One of his main tasks is to produce information and knowledge in order to alert decision-makers and other stakeholders to environmental risks and sustainable development issues in the Mediterranean, and to shape future scenarios to guide decision-taking processes.

I. INSTITUTIONAL FRAMEWORK: THE BARCELONA CONVENTION AND THE MEDITERRANEAN ACTION PLAN

The United Nations conference on the Environment, held in Stockholm in 1972, mobilised governments and public opinion and created the UNEP (Figure 1). Three years later the Mediterranean countries and the EC – the Contracting Parties / CPs – adopted in Barcelona a convention for the protection of this common sea, supplemented by a MAP. The latter was the first plan to become a Regional Seas Programme under the UNEP: the "Convention for the Protection of the Mediterranean Sea against Pollution" (Barcelona Convention – BC) was adopted in 1976 and came into force in 1978.

¹ Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, and Turkey.

Figure 1: The steps of sustainable development in the Mediterranean and Worldwide



Source: Plan Bleu, 2012. *The founding acts of sustainable development in the Mediterranean Basin greatly benefited from the impulse given by Stockholm 1972 and Rio 1992. The graph hereby shows the regional dynamics of sustainable development within the context of the global one and of regional cooperation events.*

In a first stage (1975-1995), the main objectives of the MAP were to assist the Mediterranean countries to assess and control marine pollution, to formulate their national environment policies, to improve the ability of governments to identify better options for alternative patterns of development, and to optimize the choices for allocation of resources.

In a second stage (since 1995), the “Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean” (MAP Phase II) was designed; because about 80% of the marine pollution originates from the land, it is on land that the Mediterranean must seek out and fight the sources of pollution. At the same time, the CPs adopted an amended version of the BC in order to reflect the wider mandate: the amended version came officially into force in 2004.

Although the initial focus of the MAP was on marine pollution control, experience confirmed that socio-economic trends, combined with inadequate development planning and management, are at the root of most environmental problems. Consequently, the focus of the MAP gradually shifted to include integrated coastal-zone planning and management as the key tool through which solutions are being sought.

At the 1992 Rio United Nations Conference on Environment and Development the concept of sustainable development was confirmed, and Agenda 21 was adopted. This international dynamic and the results of the previous Mediterranean work led to the development of an Agenda Med 21 in 1994 (not formally adopted), as well as to the revision of the MAP in 1995 (MAP II) and the decision in 1996 to establish a Mediterranean Commission on Sustainable Development² (MCSD). The MCSD prepared a Mediterranean Strategy for Sustainable Development (MSSD); adopted in 2005, the MSSD provides a reference framework for the sustainable development policies of riparian countries.

Since 1995 the MAP combines with a socio-economic component for preparing “integrated developmental plans and a more attentive management of the sea’s resources”. By expanding its

² The MCSD is a forum for dialogue and proposals where the CPs define a sustainable development strategy for the Mediterranean.

field of activity to the coastline and shifting from a sector-based approach of fighting marine pollution to the integrated planning and management of the coastal regions, the MAP today constitutes the prime initiator for making regional proposals and actions for sustainable development in the Mediterranean region: its work is funded by all of the CPs.

Located in Athens, the MAP Coordinating Unit is the Secretariat for the MAP. It performs diplomatic, political, and communication roles, supervising the main MAP components, as well as organizing major meetings and programmes.

II. LEGAL FRAMEWORK: THE ADDITIONAL PROTOCOLS TO THE BARCELONA CONVENTION

The Barcelona Convention has given rise to seven Protocols addressing specific aspects of Mediterranean environmental conservation (Table 1).

Table 1: The Additional Protocols to the Barcelona Convention

Protocols	Adoption	Entry into force	Remarks
Dumping Protocol Protocol for the Prevention of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft	16 February 1976 (Barcelona, Spain)	18 February 1978	The Dumping Protocol was amended and recorded as: Protocol for the Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea. Adoption: 10 June 1995 (Barcelona, Spain); not yet in force
Prevention and Emergency Protocol Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea	25 January 2002 (Malta)	17 March 2004	This Protocol replaced the Protocol Concerning Cooperation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in Cases of Emergency (adopted on 16 February 1976 in Barcelona, Spain) which was in force since 12 February 1978.
LBS Protocol Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities	7 March 1996 (Syracuse, Italy)	11 May 2008	This Protocol replaced the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (adopted on 17 May 1980 in Athens, Greece) which was in force since 17 June 1983.
SPA and Biodiversity Protocol Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean	10 June 1995 (Barcelona, Spain)	12 December 1999	The Annexes to the SPA and Biodiversity Protocol were adopted on 24 November 1996 (Monaco). This Protocol replaced the Protocol concerning Mediterranean Specially Protected Areas (adopted on 3 April 1982, in Geneva, Switzerland) which was in force since 23 March 1986.
Offshore Protocol Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from	14 October 1994 (Madrid, Spain)	24 March 2011	

Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil			
Hazardous Wastes Protocol Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal	1 October 1996 (Izmir, Turkey)	19 January 2008	
ICZM Protocol Protocol on Integrated Coastal Zone Management in the Mediterranean	21 January 2008 (Madrid, Spain)	24 March 2011	

Source: UNEP/MAP Website (1st of August 2012) -

<http://www.unepmap.org/index.php?module=content2&catid=001001001>

III. OPERATIONAL FRAMEWORK: THE REGIONAL ACTIVITY CENTRES OF THE MAP

Originally the MAP had three aspects:

- The first was institutional and legal and dealt with the implementation of the BC and its Protocols.
- The second was scientific by developing the Programme for the Monitoring and Research of Marine Pollution (MED POL, Athens).
- The third was socio-economic and worked on a systemic approach to the prospective and environmental priorities of the Mediterranean, with the setting up in 1977 of two RACs:
 - o Plan Bleu (Sophia Antipolis, France), with the task of observing, evaluating and exploring the possible developments in the relationships between the environment and development in the Mediterranean Basin, and;
 - o The Priority Actions Programme (PAP/RAC), in Split (Croatia), works for the planning of integrated coastal management. The PAP/RAC coordinates MAP's Coastal Area Management Programmes (CAMPs);

Figure 2 : The Regional Activity Centres of the MAP



In addition of MED POL, Plan Bleu and PAP/RAC, today several countries host specialised programmes and RACs (Figure 2):

- The Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), in Malta, is devoted to the Prevention and Emergency Protocol. The REMPEC assists the Mediterranean to build up their national prevention and response capabilities to be prepared for major marine pollution incidents. The centre facilitates cooperation between countries in combating accidental marine pollution from a range of hazardous substances including oil. The REMPEC is managed under the joint auspices of the MAP and the International Maritime Organisation (IMO);
- The Specially Protected Areas (SPA/RAC), in Tunisia, focuses on biodiversity and is involved in the protection of Mediterranean species, their habitats and ecosystems. It develops management plans, information tools for monitoring, and promotes awareness campaigns and the circulation of information among specialists and relevant international organisations. This centre is devoted to the SPA and Biodiversity Protocol;
- The Secretariat of the Programme for the Protection of Coastal Historic Sites (100 HSnetwork), run by the *Ateliers du patrimoine* of Marseilles (France);
- The INFO/RAC, created in Palermo (Italia) in 1993. In 2005, INFO/RAC redefined its mandate and activities towards strengthening information and communication capabilities of the MAP Secretariat;
- The Cleaner Production (CP/RAC), in Barcelona (Spain), promotes the reduction of industrial waste from the Mediterranean industrial sector and disseminates tried-and-tested cleaner production techniques. The centre also organizes training programmes, and promotes the exchange of experts, facilitating technology transfer within the region.

The Plan Bleu differs of the other RACs; it is not especially dedicated to an additional Protocol to the BC. This RAC has cross-cutting functions: it is a regional observatory of the environment and sustainable development in the Mediterranean, as well as a prospective centre producing foresight analysis at various scales. The Plan Bleu is also a centre of decision support, at the interface between scientists (knowledge component) and decisions-makers (policy component).

IV. THE PLAN BLEU FOR THE ENVIRONMENT AND DEVELOPMENT IN THE MEDITERRANEAN

Plan Bleu's work is structured around four main strategic objectives, which are as follows:

- To identify, collect and process environmental, economic and social information useful to stakeholders and decision-makers;
- To evaluate the interaction between the environment and economic and social development in order to measure what progress is being made towards sustainable development;
- To conduct analyses and prospective studies to help to shape visions for the future;
- To broadcast and circulate products and outcomes in the manner best-suited to the target public.

1. THE PLAN BLEU, AN OBSERVATORY OF THE ENVIRONMENT AND DEVELOPMENT IN THE MEDITERRANEAN

What kinds of information, statistics and maps are useful to the developmental and environmental players in the Mediterranean Regions?

Using core set of indicators and information systems, the Plan Bleu produces information and knowledge aimed at warning decision-makers and stakeholders regarding environmental and sustainable development challenges in the Mediterranean.

So as to supply those concerned with trustworthy and coherent information to help them in decision-making regarding sustainable development, the CPs have asked the Plan Bleu to strengthen its information and observation system for the situations and trends in developmental/environmental relations in the Basin and its coastal regions. The Plan Bleu's activities aim at developing of the statistical, geographical and documentary information-system to improve access to significant data; cooperating with a network of scientific partners and international and national bodies active in the Mediterranean; supporting the creation of national observatories.

By identifying, collecting and processing permanently and continually environmental, economic and social information useful to decision-makers, the Plan Bleu assesses the interactions between the environment and economic and social development in order to measure progress towards sustainable development. In a first phase of "sustainable development indicators" (SDI) provision in the Mediterranean, 130 indicators were defined, as follow-up of Agenda Med 21 activities. In a second phase, 34 indicators were associated to the 2005 MSSD, which covers four Millennium Development Goals: access to water and sanitation; official development aid; primary education for all; reduction of gender disparities.

2. THE PLAN BLEU, A CENTRE FOR SYSTEMIC AND PROSPECTIVE STUDIES

Based on analysis of the present situation and its possible developments, how can we orient ourselves towards policies of sustainable development for the whole of the Mediterranean Basin?

The Plan Bleu is a regional centre of prospective; this RAC provides foresight analysis envisioning the future (business as usual and alternative scenarios) to build and share 'pictures' of possible futures (thematic and transversal storylines at different scales) towards a more desirable future.

On the regional scale, two Plan Bleu key-publications contributed to establish the concept of sustainable development in the Mediterranean: "Futures for the Mediterranean Basin" (1990), and "A sustainable future for the Mediterranean: the Blue Plan's environment and development outlook" (2005):

(1) With a systemic vision of the Basin that took into account both the populations and their dynamics, the major sectors of the economy and the main components of the environment, the Plan Bleu undertook in 1986/87 an exploration of the region's possible futures by constructing scenarios. The *Futures for the Mediterranean Basin* (Grenon and Batisse, 1990) set the foundations for a more environment-conscious approach to development.

Those scenarios were based on coherent sets of conventional economic and demographic growth hypotheses or presumed intentional policies of North-South and South-South cooperation together with the integration of environmental and developmental factors. Possible or desirable pictures of the Basin's future emerged on the intermediate horizon of 2000 as well as that of 2025.

The contrasting results of these scenarios showed that the future of the Mediterranean will not be able to look forward to sustainable development unless if determined national strategies, relying on the goals and principles of action, are implemented and coordinated between them through reinforced cooperation in the Basin.

(2) *A Sustainable Future for the Mediterranean - The Blue Plan's Environment and Development Outlook* (Benoit and Comeau, 2005), a publication of 432 pages including statistical annexes, is the fruit of a collective expertise based on various studies and workshops organized in the last decade by the different components of the MAP, other institutions, Mediterranean networks of experts and NGOs, which has mobilized more than 300 experts from all Mediterranean countries as well as from some European countries not bordering the Mediterranean sea. This key-publication presented both a thematic status report (sector by sector), and proposals for an alternative and cross-cutting scenario of an economically more sustainable development using precise data.

3. THE PLAN BLEU, CONTRIBUTIONS TO “TERRITORIAL APPROACHES”

The Plan Bleu does not only work at regional and national scales: this RAC develops also “territorial analysis” at local scale in different kinds of area such as ICZM sites, urban agglomerations, watersheds, tourist destinations, forest areas, marine protected areas, etc.

With environmental concerns coming increasingly to the fore, as well as in a context of more decentralized decisions, social and political demands are being made in favour of public involvement in the design and implementation of long term territorial strategies. In this context the Plan Bleu has developed, tested and consolidated the “*Imagine*” method for Systemic and Prospective Sustainability Analysis (Bell and Coudert, 2005; Coudert and Larid, 2006), implemented by involving local stakeholders and using participatory approaches in the framework of several CAMPs: Malta (2000-2002), Lebanon (2002-2003), Algiers coastal zones (2003-2005), Slovenia (2005-2006), and Cyprus (2006). The Plan Bleu's role consisted mainly of facilitating and supporting the application of the “*Imagine*” method by the local teams managing the coastal environments covered by the CAMPs.

“*Imagine*” provides tools to describe, assess and examine the level of sustainability of an eco-socio-system in the past, present and future by means of indicators and based on a participatory approach considering local stakeholders as experts within their own area. This method has proven its strengths in producing shared insight into a given coastal area (diagnosis, scenarios) and fostering stakeholder participation, thus leading to the identification of desirable futures and the drafting of collegially defined and approved action plans.

Increasing concern regarding the preservation of nature areas and resources in the Mediterranean is being expressed in the growing demand to support “territorial projects”: “*Imagine*” is one of the suitable tools for providing such support.

3.1. Systemic and prospective approaches at the local scale

The Plan Bleu’s systemic and prospective approaches at the local scale consist of studying the past, present and future impact of development on the environment and natural resources. The aim is to support ‘territorial managers’ and local decision-makers in buying into the systemic and prospective analysis tools which allow them to shape possible futures based on past and current trends and, subsequently, to help them to define action plans to move them towards more desirable and sustainable futures.

Intended to address and anticipate the territory in the light of past and present actions and dynamics, foresight analysis and scenario building methods are suitable tools to support decision-making: by imagining possible (sustainable or unsustainable) futures reverse hypothetical reasoning leads to the identification of the route towards more desirable futures.

To explore the interaction between development and the environment, the Plan Bleu’s prospective approach draws on (i) systems analysis and (ii) the scenario method:

- On the one hand, by taking into account the interaction between various interdependent components, the systemic approach allows a territory and its future to be analysed as a whole and provides insight into the processes linked to each element, particularly the relations and interactions between the various elements comprising the system.
- On the other hand, the scenario method allows the possible futures of a territorial system to be sketched out. The scenarios and its descriptive narration (storylines) comprise a baseline picture, a choice of development hypotheses (assumptions), the path towards the chosen timeframe and an image of the final situation, all bound together by a coherent internal logic stemming from the combination of trend hypotheses and their consequences: e.g. the “*If..., then...*” reasoning. By designing scenarios decision-makers and other stakeholders are provided with a range of possible alternatives of the future, enabling them to better grasp the issues at stake and the risks relating to the trends observed, as well as to establish measurable medium and long term progress objectives.

“*Imagine*” is based on four key-principles:

- The systemic approach makes it possible to address the territory under consideration as a whole and to buy into a jointly constructed image of a given area.
- Foresight analysis and the scenario method are intended to guide strategy in the light of trend and alternative pictures of the future.
- The indicators and sustainability thresholds are intended to monitor and forecast trends with regard to sustainable development.
- Participatory methods rely on the expertise of local stakeholders in designing and controlling management and development projects.

3.2. Participatory approaches as a way to strengthen collaboration between various stakeholders representing different interests

“Imagine” constitutes a participation-based tool to support decision-making. This method engages the expertise of local stakeholders in jointly shaping management projects and defining action to be taken towards rendering management of the areas in question more sustainable. It is essential that local stakeholders should be involved (decision-makers, civil servants, scientists, practitioners, and representatives of civil society and private sector) and the various sectors and specialisations associated and made to work together.

Within the CAMPs context the effect of “Imagine” has been to rally and remove barriers: the local participatory workshops (Figure 4) provided a rare opportunity to discuss and debate common issues. Their user-friendly format was instrumental in “breaking the ice” between participants and provided for a dispassionate approach to the complexity of the territorial system. As public forums, the participatory workshops encouraged the sharing of concerns whilst triggering inter-sectoral(cross-cutting) processes.

Figure 3: Participatory workshops - Coastal Area Management Programme - Slovenia, 2006



Source: Plan Bleu, 2006.

The “Imagine” method proved its ability to “decompartmentalise” the work of local stakeholders in a given area, to make them work together towards shaping and defining a sustainable common future and to provide attractive information about complex situations.

4. THE PLAN BLEU, A CENTRE FOR DECISION SUPPORT

The Plan Bleu’s territorialised prospective approaches shed light on the territorial context, its trends and prospects, on the basis of which decisions have to be taken, as well as on the possible consequences of these decisions. Those approaches also focus on the socio-institutional aspects: local stakeholders constitute the lynchpin in discussions towards understanding their own interactions and the territorial systems within which they evolve and interact.

“Imagine” represents a mediation tool; stakeholder participation, facilitation of discussion and exchange of opinions, search for a common language and compromise, and multi-disciplinary

thinking are complementary components of what can be called “participative prospective” (Le Tellier and Briens, 2011).

Following the expertise gained for over 30 years, the Plan Bleu supports nowadays a wide Mediterranean network of scientists and decision makers. The Plan Bleu is recognized for having a role of interface between scientific knowledge and decision-making. This explains why the Plan Bleu is involved in several regional collaborative projects, particularly in operational research projects funded by the EU via the Seventh Framework Programme (FP7). The Plan Bleu is currently involved in two FP7 collaborative projects focusing especially on marine and coastal ecosystems:

a) PEGASO (<http://www.pegasoproject.eu>). Gathering 25 European and non-European organizations (mainly from the Mediterranean), the operational and collaborative research project PEGASO 2010-2014 (*People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast*) focuses on the eco-systemic approach related to ICZM in the Mediterranean and Black Sea basins. Devoted to establish connections and to bridge the gap between scientists and decision-makers, this project aims at supporting the implementation of the ICZM Protocol in the Mediterranean and at helping the Black Sea countries to develop a similar instrument. In addition to his contributions on tools and methods (indicators, scenarios, participation) and its involvement in the 10 “collaborative application sites / CASES”³, the Plan Bleu is part of the “Shared ICZM Governance Platform” and member of the Steering Committee of the project as “Participatory Coordinator”.

b) PERSEUS (<http://www.perseus-net.eu>). Gathering 55 European and non-European organizations, the operational research project PERSEUS 2012-2015 (*Policy-oriented marine Environmental Research for the Southern EUropean Seas*) is a 4-year policy-oriented project. It aims at implementing the principles of the EU Marine Strategy Framework Directive (MSFD) across the Mediterranean and Black Seas. Regarding the Mediterranean Basin, PERSEUS aims at strengthening the application of the “Ecosystem Approach” – EcAp process⁴ –, initiated recently by the MAP, to the management of human activities impacting the marine and coastal environments. The Plan Bleu coordinates the “Adaptive policies & scenarios” activities within the “Policy Cluster” of the project. The centre is also responsible for the tasks related to socio-economic assessments of maritime and coastal activities.

The Plan Bleu is involved both in PEGASO and PERSEUS, which are policy-oriented projects, for getting a specific role to support decisions (responses) such as the MAP ICZM Protocol and the EU MSFD. In the framework of such projects, the Plan Bleu has to facilitate dialogue between scientists and stakeholders by setting-up specific bodies: i.e. PEGASO End User Committee and PERSEUS Stakeholder Platforms.

³The CASES represent a sample of coastal issues in the Mediterranean and Black Sea basins. They are a collection of sites with different issues as well as different stages for the implementation of ICZM approach. There are seven CASES in the Mediterranean: Bouches du Rhone (South of France), Al Hoceima Bay (Morocco), North Adriatic (Croatia, Italy, Slovenia), Islands of the Aegean (Greece), protected area of Dalyan-Koycegiz (Turkey), North Lebanon, and Nile Delta (Egypt). There are three CASES in the Black Sea countries: Danube Delta (Romania), Sevastopol Bay (Ukraine), coastal area of Guria (Georgia). More information: <http://www.pegasoproject.eu/wiki>.

⁴ The ecosystemic approach expressed in the Environmental Compliance Assistance Program (ECAP) is to promote a sustainable use of the goods and services provided by the sea, while rehabilitating or preserving the ecological conditions of coastlines and the sea. The ecosystemic approach was adopted by many conventions and action plans in favor of regional seas. It was adopted by the CPs to the BC in 2008.

In this framework, several exercises of stakeholder consultation have to be implemented: policy-oriented workshops, brainstorming sessions during general meetings, on-line interaction through email exchanges, forums and virtual conferences, in-depth interviews (face-to-face), regular contacts by email and phone, etc. Plan Bleu has to synthesize the results of such “public spaces of participation” for communication and integration among the main stakeholders and institutional bodies that promote, at various scales from global to local, sustainable development of the marine and coastal areas.

4.1. The PEGASO “End User Committee” to bridge the gap between scientists and decision-makers

Considering the complexity of the PEGASO project (lot of participants who come from Europe, North-Africa, Middle East, and Black Sea basin) and its relevance to support environmental policies, the End User Committee is involved in the implementation of the project, both in the “Shared ICZM Governance Platform” and in the CASES, to take advantage of the PEGASO expertise and guidance, as well as methods and lessons learned, for facilitating ICZM decision making.

The End User Committee is a consultative panel of about twenty members that brings together various stakeholders interested by the outcomes of the project. “End users” are defined as stakeholders who can use the project’s concepts, tools and outcomes, namely individuals, groups, bodies, communities or institutions that are concerned with, or have an interest in, the coastal areas and resources and their management. They include all those who affect and/or are affected by the policies, decisions, and actions regarding coastal ecosystems, including public sector agencies, private sector organizations, NGOs, and external agencies such as donors who are interested by ICZM in the Mediterranean and Black Sea basins.

Since one of the main challenges of the PEGASO project is to integrate two essential components, namely (i) developing tools and methods (toolbox) and (ii) implementing the toolbox in the CASES, the End User Committee is invited to give advices on the practical implementation of tools (demonstration) for a pragmatic and realistic approach in the context of the CASES.

4.2. The PERSEUS “Stakeholder Platforms” to share adaptive policies for achieving Good Environmental Status of the Southern European Seas

PERSEUS is a “policy-oriented” research project that assesses the dual impact of human activity and natural pressures on the Mediterranean and Black Seas. It merges natural and socio-economic sciences to predict the long-term effects of these pressures on marine ecosystems. The project aims to design an effective and innovative governance framework, which will provide the basis for policy-makers to turn back the tide on marine life degradation.

By creating and facilitating a platform for international scientific cooperation across the Mediterranean and Black Seas, in both EU and non-EU countries, the PERSEUS project provides the scientific community with an opportunity to ‘translate’ scientific knowledge into evidence-based policy recommendations for a better governance of the Southern European Seas (SES), and to

achieve or maintain their 'Good Environmental Status' (GES), in line with objectives and principles of the EU MSFD.

The project aims at supporting policy-makers to make new measures based on solid scientific evidence. Science is playing a new role, as partner, by developing innovative tools to support policy-makers for meeting the objectives of the MSFD. The ultimate aim is to develop new management schemes and scenario-based adaptive policies⁵ towards better governance of the human-made pressures in the SES.

Activities devoted to "stakeholder dialogue" aim at defining new governance tools to achieve and/or maintain the GES of the SES. The development of several "Stakeholder Platforms", at different scales, represents an element of the participative strategy part of a future adaptive policy process. "Stakeholder Platforms" are under development in four Pilot Cases⁶ as well as to the SES basin level (Mediterranean and Black Sea basins).

CONCLUSION

With questions relating to the environment and sustainable development coming increasingly to the fore, social and political demands are being reflected in the call for greater public participation in the discussion, design and implementation of long term territorial strategies. Within this context, the territorial approaches developed by the Plan Bleu connect two essential components: (a) the production of territorialised data adjusted to various time scales (foresight analysis and scenario building) and (b) stakeholder participation. The aim is to enhance the knowledge needed for long term strategic decision-making by exploring possible futures using the scenario method on the one hand, and to bring more local stakeholders on board through the collective learning and joint work which gives rise to negotiated consensus on the other. This kind of approach makes sense not only because it bolsters local community for sustainable management of areas or resources, but also within the broader perspective of territorial development.

Collaborative projects such as PEGASO and PERSEUS allow the Plan Bleu to enhance lessons learned in past experiences, and to revisit, disseminate and share efficient tools and methods that have yielded significant results in the context of the MAP activities. Those EU projects allow the Plan Bleu to strengthen its role of interface between policy-makers and scientists to "democratize" access to scientific knowledge on the one hand and to support the decision-making on the other.

⁵ "Adaptive policies" mean policies that can be effective under changing conditions. Such policies – adaptive both to anticipated and unanticipated conditions – have to be "devised not to be optimal for a best estimate future, but robust across a range of futures" on the one hand and to "respond to changes over time and make explicit provision for learning" on the other (Walker W. E., Rahman S. A. and Cave J., 2001, *Adaptive policies, policy analysis, and policy-making*, European Journal of Operational Research 128, 282-289). See also: Holling C.S., 1978, *Adaptive Environmental Assessment and Management*, Chichester: John Wiley, 377 p.

⁶(i) West Mediterranean: Gulf of Lions - Catalan Sea; (ii) Central Mediterranean: Northern Adriatic Sea; (iii) East Mediterranean: Aegean Sea - Saronikos Gulf, and; (iv) Western Black Sea: Romania and Bulgaria.

REFERENCES

Bell, S. and Coudert, E. (2005), "A Practitioner's Guide to "Imagine", the Systemic and Prospective Sustainability Analysis", Sophia Antipolis, France, Blue Plan Paper n°3.

Benoit, G. and Comeau, A. (dir) (2005), *A sustainable future for the Mediterranean: the Blue Plan's environment and development outlook*, United Kingdom, London: Earthscan, 450 p.

Coudert E. and M. Larid (2006), « IMAGINE : un ensemble de méthodes et d'outils pour contribuer à la gestion intégrée des zones côtières en Méditerranée », *VertigO*, Vol. 7, n°3.

Grenon, M. and M.Batisse (1990), *Futures for the Mediterranean Basin. The Blue Plan*, Oxford: Blue Plan, Oxford University Press.

Le Tellier, J., Giraud J.-P. and A. Lafitte (2011), *Imagine: The Systemic and Prospective Sustainability Analysis*, MedCoast 11 – The Tenth International Conference on the Mediterranean Coastal Environment, Rhodes (Greece), 25-29 October 2011, Proceedings.

Le Tellier, J. and M. Briens (2011), "Retours d'expériences et perspectives d'utilisation de la méthode Imagine - Analyse Systémique et Prospective de Durabilité", *Forêt Méditerranéenne*, Tome XXXII, n°3.

UNEP-MAP (2005), *Mediterranean strategy for sustainable development. A framework for environmental sustainability and shared prosperity*, Athens, MAP.

UNEP-MAP (2005), *Convention for the Protection of the Marine Environment and the Coastal Regions of the Mediterranean, and its Protocols*, Athens, MAP.

UNEP-MAP-Plan Bleu (2012), "20 years of sustainable development in the Mediterranean: review and outlook", Blue Plan Notes n°22 - June 2012.

UNEP-MAP-Plan Bleu (2008), "The Blue Plan's sustainable development outlook for the Mediterranean", Sophia Antipolis, Plan Bleu.

UNEP-MAP-Plan Bleu (2009), *State of the environment and development in the Mediterranean – 2009*, Athens, MAP.

UNEP-MAP, MIO-ECSDE, MED Forum (2002), *Public participation and civil society in the Mediterranean for environment and sustainable development*, Athens.