Project co-financed by the European Regional Development Fund

# CO-EVOLVE

Promoting the co-evolution of human activities and natural systems for the development of sustainable coastal and maritime tourism

# Deliverable 4.2.1

## Training Material

### Activity 4.2

Preparing the Pilot actions implementations

**WP4**

**PAP/RAC**

Programme cofinanced by the European Regional Development Fund

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## *Introduction*

Co-Evolve is a project that brings together partners determined to develop sustainable tourism development plans for identified pilot areas. While the actions for each of the pilot sites are very different from one another, the partners have a common goal: to advance towards a sustainable tourism in accordance with the ICZM Protocol and MSP principles in a participatory approach.

This goal has to be pursued in a common approach in order to better plan and manage tourism offer in the Mediterranean basin, allowing maximizing the possibilities of each destination while respecting its carrying capacities. This approach will be used as well in the south Mediterranean countries when transferring the results in the framework of the WP5.
The objective of the training courses is to get project partners, in particular those implementing pilot actions at local level, acquainted with the ICZM Protocol, strategic planning process, sustainability indicators, MSP principles and participatory approaches with the aim to have a common understanding and harmonized approach when preparing sustainable tourism plans for pilot areas. This will allow local tourism actors and stakeholders to get a common basis for a successful planning, leading to integrated decisions in sustainable tourism, helping them to make more informed and integrated decisions for the governance and management of tourism in the Mediterranean.
It is important to remember that though focusing on sustainable tourism, the training courses need to properly take into account the relationships between disciplines and issues. The common approach will then:

- Offer multidisciplinary views on issues that occur on coastal environments;
- Avoid the limitations of traditional disciplines, respectfully accepting their contribution in the sectorial knowledge they provide;
- Focus on the necessary skills of coastal managers always considering the ICZM and MSP viewpoints.

In order to allow the participants of these trainings to adequately prepare themselves and to facilitate the holding of these workshops, PAP / RAC has made a compilation of extracts of the most relevant documents as well as the most recent strategic orientations in the present document.

In order to be user-friendly, this document is following the structure of the training course and is organized on the following way:

- The first chapter presents the ICZM Protocol as one of the main legally binding instruments for the sustainable development of human activities in the coastal zones of the Mediterranean basin. It also explains the links in between ICZM Protocol and the MSP principles.
- In the second chapter, a step-by-step methodology for elaborating a sustainable tourism-driven strategic plan in line with the ICZM Protocol is proposed in order to facilitate the task of the pilot area coordinators.
- The third chapter is dedicated to sustainability indicators for tourism identified in the framework of Co-Evolve project (during the studying phase), which are tools for measuring the success of the implementation of the strategic plan.
- The fourth chapter is getting more in detail in MSP planning as a complement to ICZM in the marine part of the coastal zone.
- Finally, the fifth chapter introduces two approaches which may be used by pilot area coordinators in order to insure and inclusive and efficient participation of relevant actors during the planning process.

## *Chapter 1: the ICZM Protocol and its relation to MSP*[1]

*There is general agreement that over the last few decades the Mediterranean coastal zones have set out on an unsustainable development path (Benoît and Comeau, 2005). The intensive shift of societies and economic activities towards the coast – a global phenomenon that is particularly acute in the Mediterranean – has a major impact on the integrity of natural ecosystems and on all associated ecosystem services. Faced with this situation, ICZM is acknowledged as a key tool for implementing sustainable development in coastal zones (Hatziolos et al., 1998).*

Signed in January 2008 by 14 of the 22 Parties to the Barcelona system, now ratified by 11 Parties (Table 1) and entered into force on 24 March 2011, the Mediterranean ICZM Protocol thus aims to give even greater support to the Mediterranean States in achieving sustainable development.

[1] This chapter is a compilation of extracts of the two following documents:

- PAP/RAC (2008), Leaflet "Protocol on Integrated Coastal Zone Management inthe Mediterranean"

- Rochette J., Wemaëre M., Billé R., du Puy-Montbrun G., (2012), A contribution to the interpretation of legal aspects of the Protocol on Integrated Coastal Zone Management in the Mediterranean, UNEP, MAP, PAP/RAC, 72 p. + annexes.

Table 1: List of Parties to the ICZM Protocol

| 2008 Integrated Coastal Zone Management (ICZM) Protocol | | | |
|---|---|---|---|
| **Contracting Parties** | **Signature** | **Ratification** | **Entered into force** |
| Albania | - | 04.05.2010/AD | 24.03.2011 |
| Algeria | 21.01.2008 | - | - |
| Bosnia and Herzegovina | - | - | - |
| Croatia | 21.01.2008 | 29.01.2013/R | 28.02.2013 |
| Cyprus | - | - | - |
| European Union | 16.01.2009 | 29.09.2010/AP | 24.03.2011 |
| Egypt | - | - | - |
| France | 21.01.2008 | 29.10.2009/AP | 28.02.2013 |
| Greece | 21.01.2008 | - | - |
| Israel | 21.01.2008 | 08.04.2014/AP | 02.03.2016 |
| Italy | 21.01.2008 | - | - |
| Lebanon | - | 01.08.2017/AD | 31.08.2017 |
| Libya | - | - | - |
| Malta | 21.01.2008 | - | - |
| Monaco | 21.01.2008 | - | - |
| Montenegro | 21.01.2008 | 09.01.2012/R | 08.02.2012 |
| Morocco | 21.01.2008 | 21.09.2012/R | 21.10.2012 |
| Slovenia | 21.01.2008 | 01.12.2009/R | 24.03.2011 |
| Spain | 21.01.2008 | 22.06.2010/R | 24.03.2011 |
| Syria | 21.01.2008 | 22.02.2011 | 24.03.2011 |
| Tunisia | 21.01.2008 | - | - |
| Turkey | - | - | - |

Adhesion = AD
Approval = AP
Ratification = R

Source: PAP/RAC[2]

### *1.1. A unique legal instrument*

The ICZM Protocol is the seventh Protocol in the framework of the Barcelona Convention and represents a crucial milestone in the history of MAP. It completes the set of Protocols for the Protection of the Marine Environment and the Coastal Mediterranean Region. It allows the Mediterranean countries to better manage and protect their coastal zones, as well as to deal with the emerging coastal environmental challenges, such as the climate change.

The ICZM Protocol constitutes the first supra-State legal instrument specifically aimed at coastal zone management. Previously, coastal areas were governed in a fragmented manner by international law: sometimes a coastal zone was covered by protective measures set out in a text with a broader material or geographical scope; sometimes an activity, a habitat or a species specific to this area was covered by sectoral regulations (Prieur, 1984). Furthermore, the rare instruments aimed at moving beyond sectoral policies and guiding the national systems towards integrated coastal management remained confined to the realm of soft law.

[2] http://www.pap-thecoastcentre.org/about.php?blob_id=56&lang=en

The Protocol is therefore an innovative instrument in several respects. First, it marks an important shift forward from the regulation of coastal zones by international law, moving beyond the simple framework of recommendations in favor of binding legal obligations. Second, it dramatically alters the traditional field of inter-State cooperation, moving into disciplines (administrative law, urban planning law, laws covering coastal economic activities, etc.) that were previously governed only by national laws.

The Protocol defines ICZM as "*a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts*". Integrated management therefore particularly implies taking into account the interrelationships that exist between uses of the sea and coastal zones and the environment that they potentially affect. In this sense, ICZM aims to address the "*implications of development, conflicting uses, and interrelationships between physical processes and human activities*" (Cicin-Sain and Knecht, 1998). From a methodological viewpoint, the aim is thus to go beyond the sectoral approach and to make coastal management coherent by striving to achieve an articulated approach to all of its components: this is one of the fundamental dimensions of integration. This does not however imply abandoning sectoral policies, since ICZM is intended to bring them into line rather than to replace them (Cicin-Sain and Knecht, 1998) – which would not be possible anyway since policies are, and will remain, essentially sectoral. Thus, integrated management "*is not a substitute for sectoral planning, but avoids fragmentation by focusing on the linkages between different sectors*" (Council of Europe, 1999).

### *1.2. Key features of the ICZM Protocol*

The ICZM Protocol text is:

• Innovative: it represents innovation in international law, since there is no precedent of regional initiatives.

• Forward-looking and proactive: it aims at preventing and not only reacting to coastal problems.

• Comprehensive: it covers all issues crucial for coastal environment and its protection in the 21st century.

• Integrated: it ensures institutional co-ordination, co-ordination of national, regional and local authorities, involvement of non-governmental organizations and other competent organizations, as well as the integrity of sea and land areas.

### *1.3. Content of the ICZM Protocol*

The text of the Protocol emphasizes that the Parties shall define common regional framework for Integrated Management of the Mediterranean coastal zone and shall take necessary measures to strengthen regional co-operation for this purpose. Countries should develop their national ICZM strategies as an outset for all other ICZM activities, and prepare coastal implementation plans and programmes. The Protocol should ensure sustainable development of coastal zone, sustainable use of natural resources and integrity of coastal ecosystems, landscapes and geomorphology. It should protect coastal zone and prevent the effects of natural hazards, and achieve coherence between public and private initiatives.

The Protocol is very precise on:

• defining of the coastal zone where it means *"...the geomorphologic area either side of the seashore in which the interaction between the marine and land parts occurs in the form of complex ecological and resource systems made up of biotic and abiotic components coexisting and interacting with human communities and relevant socio-economic activities*".

• defining of the coastal setback as *"...a zone where construction is not allowed. Taking into account the areas directly and negatively affected by climate change and natural risks, this zone may not be less than 100 meters in width, but it leaves possibility to adapt*".

• formulation and development of coastal strategies, but also land-use strategies, plans and programmes covering urban development and socio-economic activities, as well as other relevant sectoral policies.

• formulation of Environmental Impact Assessment for public and private projects, and Strategic Environmental Assessment for plans and programmes which affect the coastal zone.

• developing policies for preventing natural hazards, particularly those resulting from the climate change.

• applying the ecosystems approach to coastal planning and management so as to ensure the sustainable development of coastal zones, taking into account specificities of coastal ecosystems, in order to preserve coastal natural habitats, natural resources and ecosystems, landscapes...

• reporting on the implementation of the Protocol, including measures taken, their effectiveness and the problems encountered upon their implementation.

Box 1: ICZM Protocol milestones

**2002 – 2003**: Preparation of the Feasibility Study, which demonstrated the need for a new regional legal instrument on coastal zone management in a form of the ICZM Protocol.

**2003**: 13th Ordinary Meeting of the Contracting Parties (Catania, November 2003) recommended that PAP/RAC prepare the draft Protocol on the basis of a broad process of consultation among experts and other stakeholders.

**2004**: Regional Stakeholders Forum: "ICM in the Mediterranean: Towards Regional Protocol" (Cagliari, May 2004) provided guidelines for drafting the text of the Protocol.

**2005**: 14th Ordinary Meeting of the Contracting Parties (Portoroz, November 2005) decided to establish a Working Group to develop and finalize the draft text of the Protocol, with a view of its consideration and possible approval by the Contracting Parties at their 15th Ordinary Meeting.

**2006 - 2007**: The negotiation stage and drafting of the text of the Protocol. After five meetings of the Working Group, the Parties reached consensus on the text.

**2008**: The final text of the Protocol was presented at the 15th Ordinary meeting of the Contracting Parties (Almeria, January 2008), where it was approved and prepared for signing. The Protocol was signed at the Conference of the Plenipotentiaries (Madrid, January 21, 2008).

### *1.4. Linking the ICZM Protocol to MSP principles*

Although MSP is not expressly mentioned in the Protocol on ICZM in the Mediterranean, spatial planning of the coastal zone, including of the marine part, is considered an essential instrument of the implementation of the same Protocol. MSP can be defined as "*a process through which human activities can be analyzed and organized in coastal and maritime areas in order to achieve ecological, economic and social objectives" (DIRECTIVE 2014/89/EU). "Essentially, MSP is a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve objectives usually specified through a political process"* (Ehler and Douvere, 2009). Given the intrinsic relations in between land and marine part of the coastal zone, explicitly recognized by art. 7 "Land-sea interactions" of the Directive, MSP can fully be considered as a tool for the implementation of the ICZM Protocol on the marine part of the coastal zone (PAP/RAC, 2015). The MSP approach is entirely consistent with the ICZM Protocol's principles.

The complete text of the ICZM Protocol is available in Appendice 1.

In order to learn more on the ICZM Protocol, PAP/RAC advices you the following links:

- Interpretation of legal aspects of the ICZM Protocol: http://www.pap-thecoastcentre.org/regional_medpartnership_workshop/documents/ICZM%20Protocol_Legal%20aspects.pdf

## *Chapter 2: Strategic planning for tourism development3-A Step-by-step approach for the Mediterranean*

*Tourism is one of the most important activities in coastal areas and requires an important effort in terms of planning, coordination and integration with existing policies and governance tools. Aim of this guideline is to offer a step-by-step methodology to construct a tourism-driven strategic plan for sustainable development of coastal areas, by integrating main principles and goals provided by the Integrated Coastal Zone Management recommendations (UNEP/MAP/PAPRAC ICZM Process, 2012) and the Sustainable Coastal tourism approach guidelines (UNEP-PAP/RAC, 2009).*

The proposed planning methodology is organized in different consequential steps that constitute an adaptive and cyclical process. It consists of 6 major phases, each of which includes key tasks and steps. The iterative process of tourism-driven strategic planning in coastal areas is reported in Figure 1. Each phase of the process is presented in detail in the following paragraphs.

The main goal of the present guideline is to offer the opportunity to local and regional administrations at MED scale to use an integrative methodology for planning tourism-driven strategies.

[3] This chapter is extracted from the following publication:
Magni, F., Appiotti, F., Maragno, D., Innocenti, A., Negretto V. and Musco, F., 2018, "Guidelines for Tourism-driven strategic planning", Deliverable 3.18.1
The methodology designed for Co-Evolve has been adapted by IUAV from the ICZM Process (fig. 1) defined in the document "The ICZM Process, a roadmap towards coastal sustainability" available on the link http://www.pap-thecoastcentre.orf/pdfs/ICZM%20Process.pdf, as well as from the Deliverable of 3.18.1 "Guideline for Tourism-driven strategic planning".

Figure 1: Conceptual framework of the methodology to the tourism-driven strategic plans construction


Source: IUAV for Co-Evolve

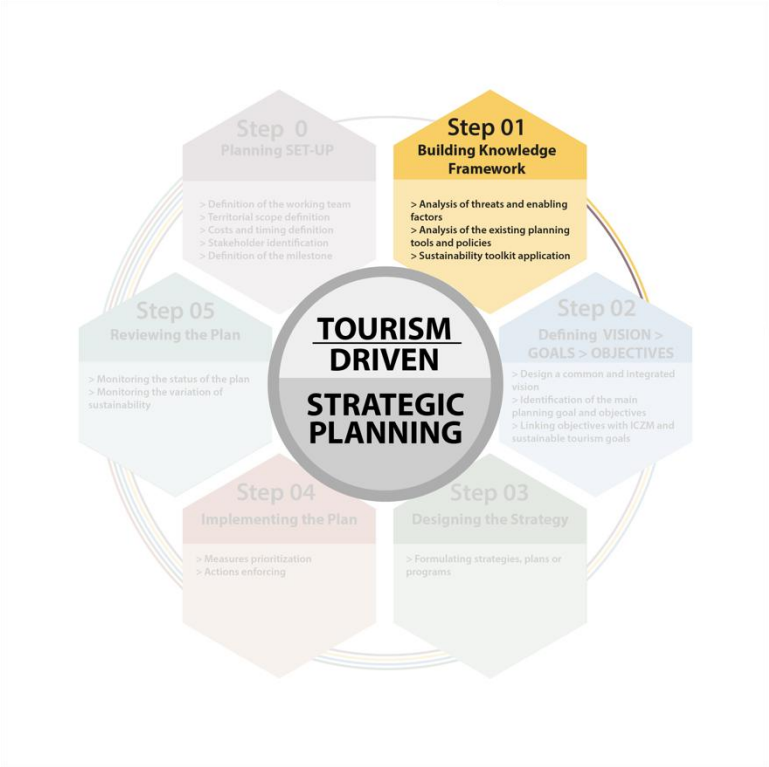

### *2.1. (step 0) - Planning set-up*

The main aim of this step, that can be considered the most important pre-planning phase, is to create the needed bases for the subsequent implementation of the whole planning process. The phase can be subdivided into different tasks that are essential to begin an effective planning process:

- Identification of needs for a tourism-driven strategic planning. A preliminary identification of the planning scope is essential to construct more easily and efficiently the future tasks and steps. Specifying what you want to tackle through the strategic plan will keep the efforts focused and oriented throughout the whole planning process.

- Definition of the working team. The definition and identification of a working team is essential to coordinate the process. *The choice of the Working team will influence the planning goals, objectives, and probably the strategy that will be put in place and for this reason must be representative of the core political and financial stakeholders in the process.* Furthermore, the working team should be a multi-sectoral group and may also include external or international experts capable to provide a wider vision of the area. The Working team will be responsible of: (i) preparing the stakeholders engagement and communication strategy; (ii) performing the analysis of knowledge building; (iii) identifying and designing vision, goals and objectives for the development of the tourism-driven strategic plan; (iv) developing the strategy and the connected action plan for the selected priorities; (v) reviewing the draft action plan and the strategic plan after the suggestions and comments obtained by political stakeholders; (vi) providing additional assistance for the strategies implementation.

- Definition of the territorial scope. The task mainly consists in the identification of area where the planned activities (strategies, measures and actions) will be implemented.




- Identification of stakeholders. *The identification and engagement of stakeholders in the planning process is essential to make the process more structured and effective.* In this task, the technical, consultative and political stakeholders useful to the process will be identified and previously informed of the activities that are starting. A specific methodology for the stakeholders' involvement should be designed. Furthermore, a communication and information strategy should also be prepared.
- Construction of the work plan and definition of "milestones". The work plan should be detailed in tasks, responsibilities and milestones. A preliminary identification of "milestones" is essential to address the construction of the planning process. The milestones identified will act as a roadmap, in terms of time constraints and outputs, capable to effectively address the planning process. A simple Gantt chart that shows graphically the order in which the various stages of the planning process should be completed, could be essential to reach the final output and to communicate with stakeholders.

### *2.2. (step 1) - Building knowledge framework*

The overall aim of the step "Building Knowledge framework" is to analyze the area, in a coherent and integrate way, in order to build up the knowledge to support the decision-making process provided in Steps 2 and 3, in which the vision and objectives are defined and the strategy is constructed. This step is organized in 3 main tasks.

1. The first task aims to collect information about the existing area status in relation to sustainable tourism development. The information that should be collected and subsequently analyzed are: (i) threats and enabling factors that affect the co-evolution of area's tourism development, (ii) area's sustainability status; (iii) existing policies and plans.

The analysis of main threats and enabling factors for co-evolution of tourism in coastal areas aims at addressing priorities for sustainable development of coastal and maritime tourism. According with literature and assessment of tourism development in coastal area, the threats of sustainable tourism that should be considered are:

- climate change and morphological stability;
- littoralization and urbanization;
- touristic fluxes and carrying capacity;
- Pollution and other anthropogenic pressures affecting ecosystems;
- Conflicts among different uses on land and sea and land-sea interaction.

Figure 2: First phase of the Building Knowledge framework step.

The data that should be collected are shown using colors.


Source: Iuav for Co-Evolve

Moreover, the enabling factors for co-evolution of tourism in coastal areas to be considered are:

- Coastal protection measures;
- Ecosystem protection;
- water cycle and depuration;
- transport and accessibility;
- governance.

The data and information to be collected and analyzed should be “fit for purpose” to design the area’s status of the art.

Moreover, information about area’s sustainability status should be collected using the “Sustainability Toolkit” (Co-Evolve project - Deliverable 3.16.1). According with the Deliverable 3.16, the information about sustainability status can be collected using a list of indicators. The list is comprehensive of all the indicators that can be related to the sustainable tourism of coastal areas. A selection of these indicators must be made considering the relevance with the planning area’s peculiarities. Finally, a collection of information about existing plans and policies will help to determine whether and where there are existing actions that are already addressing the issue of sustainable tourism development, even though these are not specifically targeted.

2. The second task aims at analyzing data collected in order to obtain a knowledge framework useful to construct planning priorities and subsequent goals and objectives. The analysis must be strongly focused on the planning main goal. The analytical phase performed, in terms of main results obtained, should be synthetically presented to technical stakeholders to provide them a base for discussion and updating. As a matter of fact, the value of local and technical knowledge should be recognized as a source to improve the quality of the analysis itself.

Figure 3: Second phase of the Building Knowledge framework step.

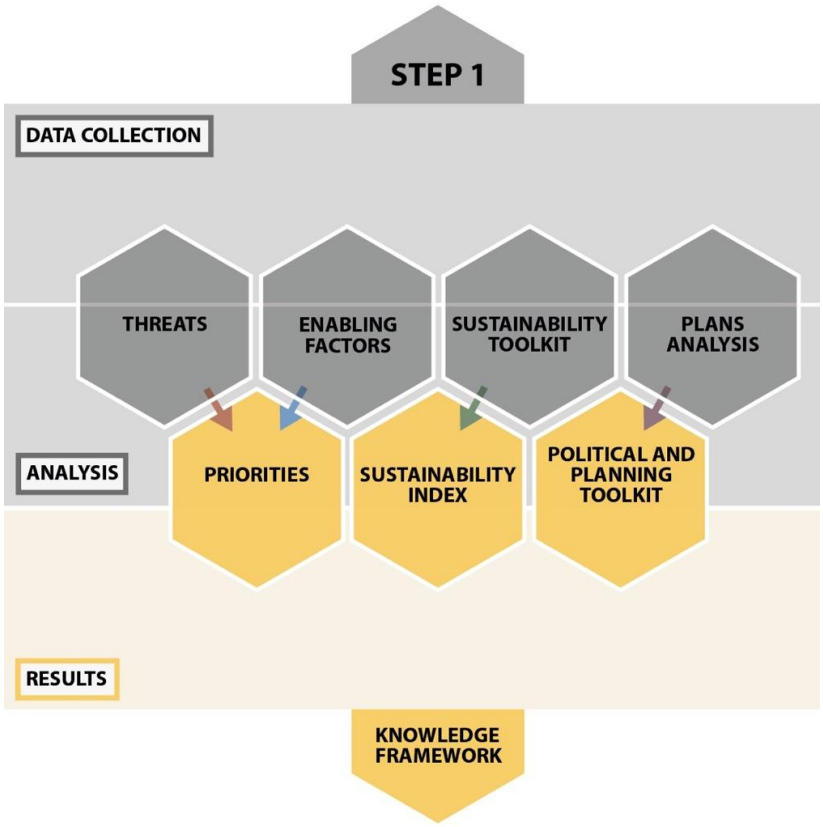
Analysis of data collected in order to identify planning priorities, sustainable status and potential integrable existing policies and plans.


Source: Iuav for Co-Evolve

3. The third task's purpose is to organize the results obtained from the previous phases to facilitate the subsequent steps execution. At the end of this phase, a final summary of existing conditions of the area should be produced focusing on the agreed points.

Figure 4: Third phase of the Building Knowledge framework step.

Integration of the results obtained and analyzed in the previous phases in order to obtain a coherent and useful knowledge framework.




Source: Iuav for Co-Evolve

**Box 4 - The importance of geo-spatial data in supporting the analysis process**

*The definition and design of the territorial strategies need to assess and understand how the urban system that we would like to plan is organized. The territory is composed of urban (infrastructures, buildings,…), social-economic and environmental elements and of strong and weak relations between them. Each element in the territorial system has geographical coordinates that allows the location of the elements in the space. Which are the elements composing the territorial system under analysis? Are there any conflicts between the different spatial uses? Are there any pressures or impacts emerging from the anthropic uses to the environmental system? Which strategies are needed to improve the system or fix the emerging conflicts? These are some questions that has needs answers throughout the analytical process.*

*To build analysis process is important to have a complete database and geodatabase. The geodatabase helps to build the state of the art through the maps of environmental, infrastructural and socio-economic system. In addition, to support the predisposition of the plan a geo-dabase is needed to monitoring the goals of plan and evaluate the implementation situation of the actions decided in the plan.*


### *2.3. (step 2) - Defining goals vision and objectives*

The starting point to create an effective strategy for sustainable tourism development in coastal areas is to set the main direction to which we want to move: the vision and its related objectives. The construction of the vision for the area and the identification of strategic specific objectives must be constructed, on one hand, addressing the strategic issues emerged from the analytical phase, and, on the other hand ensuring the coherence and compliance with ICZM and Sustainable tourism principles and main goals.

Therefore, the step should be subdivided in 3 main tasks:

1. Design of a common and integrated vision for the area.

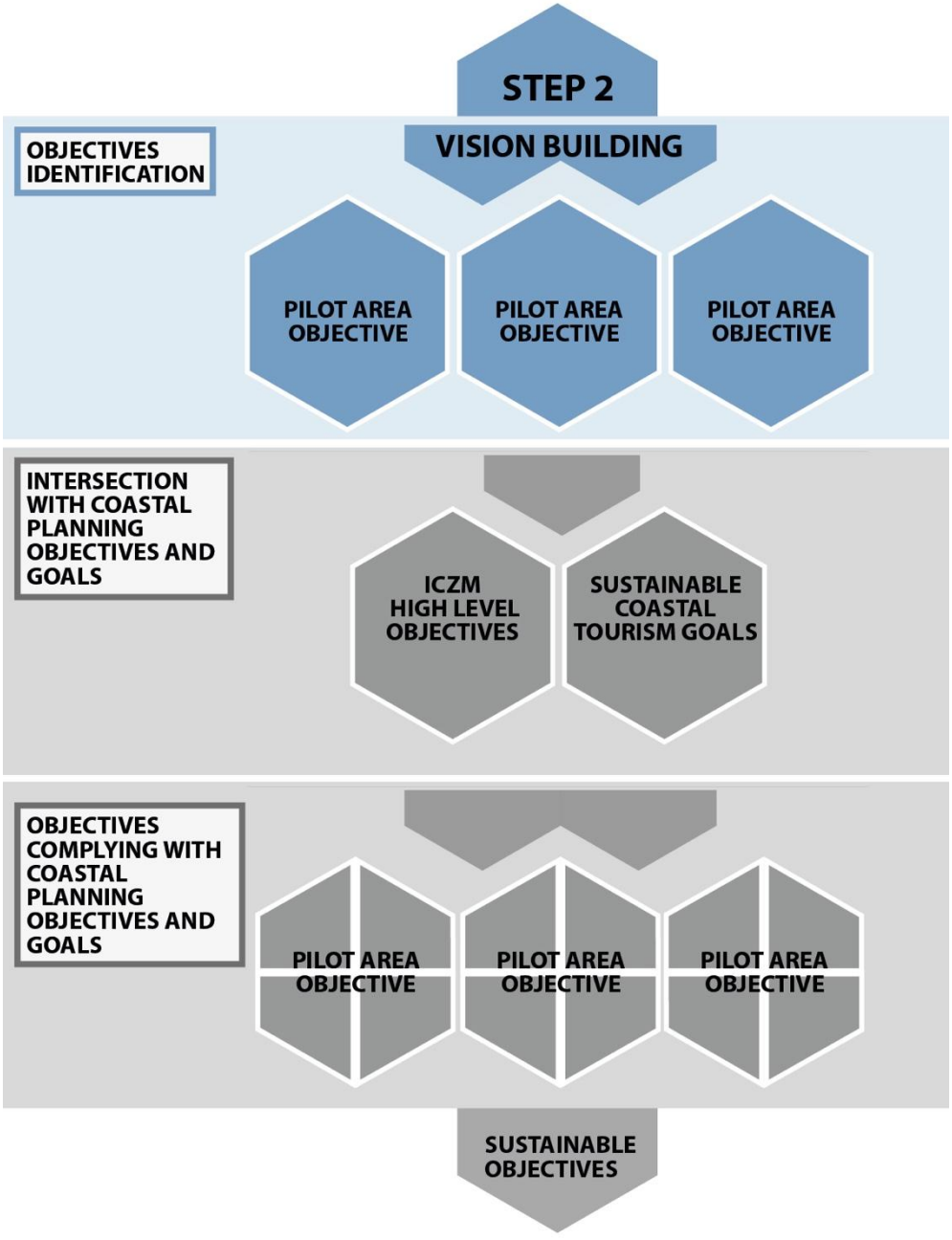
The Vision statement should express a clear view of what is the desired or intended future of the coastal area in terms of strategic and sustainable tourism development. It should be constructed starting from the drivers of sustainable development promoted by national and international policies and planning, and should address the priorities emerged from the Step 1. The vision should be agreed among stakeholders and compliant with priorities emerged. A vision statement establishes a “big picture” for tourism development in coastal area and it is very useful in promoting stakeholders’ participation and in focusing energies. According to ICMZ Roadmap (UNEP), a vision should be:

- both rational and inventive;
- clear and compelling;
- aligned with the community’s aspiration and existing policies;
- a vivid picture of a desired future.

The Vision Statement will take the form of a draft that would set out for public discussion the principles that would act as a guide for all the sectors and public/private stakeholders involved in the tourism-driven development of the area.

Figure 5: Figure shows the main steps for the identification of area's specific objectives.

In the first task, in blue colors, a future vision for the area's tourism development must be constructed and identified the preliminary objectives




Source: Iuav for Co-Evolve

2. Identification of the main planning goals and objectives. The identification of main Goals (High Level Objectives) and strategic objectives aims to describe how the implementation of the vision can be strategically achieved and implemented in the medium-long term. Setting objectives involves a continuous process of research and decision-making. The main referring goals for the tourism sustainable development of the Mediterranean area are the Strategic of development identified by the Interreg MED programme and the strategic sub-objectives specified for each axis.

Figure 6: Axes of development


Source : IUAV for Co-Evolve

Specific tourism-driven objectives should describe, in measurable terms, the desired end state and are the measure of the planning process performance. In order to be easily measurable, objectives must be:

- Focused on a result, not on an activity;

- Consistent;

- Specific;

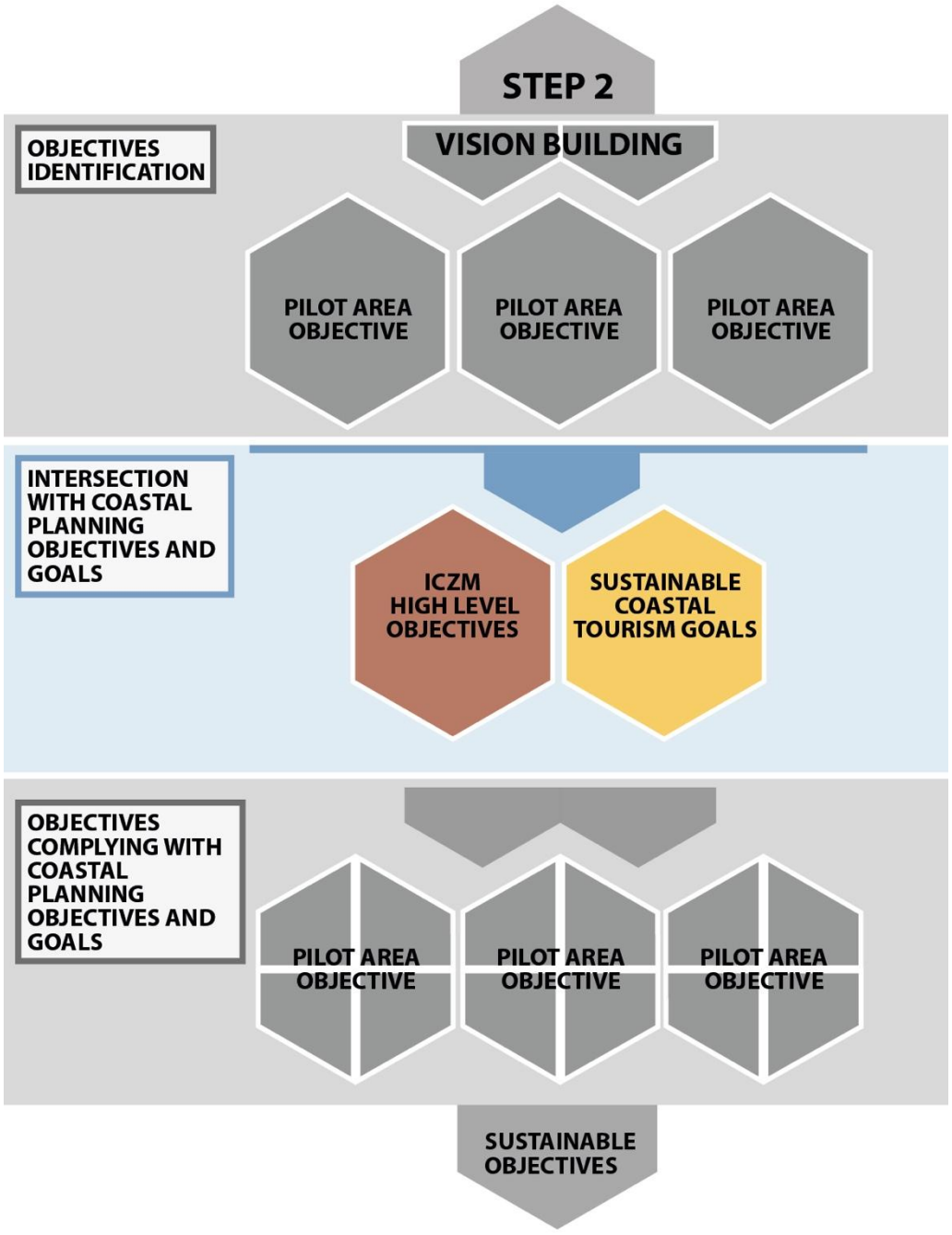
- Measurable;

- Related to time;

- Attainable.

The specific objectives for the area should be identified starting from: (i) goals and strategic objectives identified for the MED scale and reported in the Figure 8; (ii) issues/priorities identified in the phase of area analysis; (iii) the vision constructed. This operation will assure a framework of coherence at the different planning scales.

Figure 7: Intersection of the objectives identified for the area with main coastal planning objectives and goals




Source : Iuav for Co-Evolve

3. Linking objectives with ICZM and Sustainable tourism goals

Once the objectives for the area will be identified in complete coherence with the Interreg MED programme for the development of the Mediterranean area, an analysis of conformity of the objectives with the ICZM and Sustainable tourism planning goals should be performed. To perform this activity, essential to ensure that the objectives identified are in line with

existing planning tools at coastal scale, a “matrix of conformity” that intersect ICZM High Level Objectives (UNEP/MAP/PAPRAC ICZM Guidelines, 2012) and Sustainable Tourism main Goals (UNEP, 2009) Figure 8 may be used.

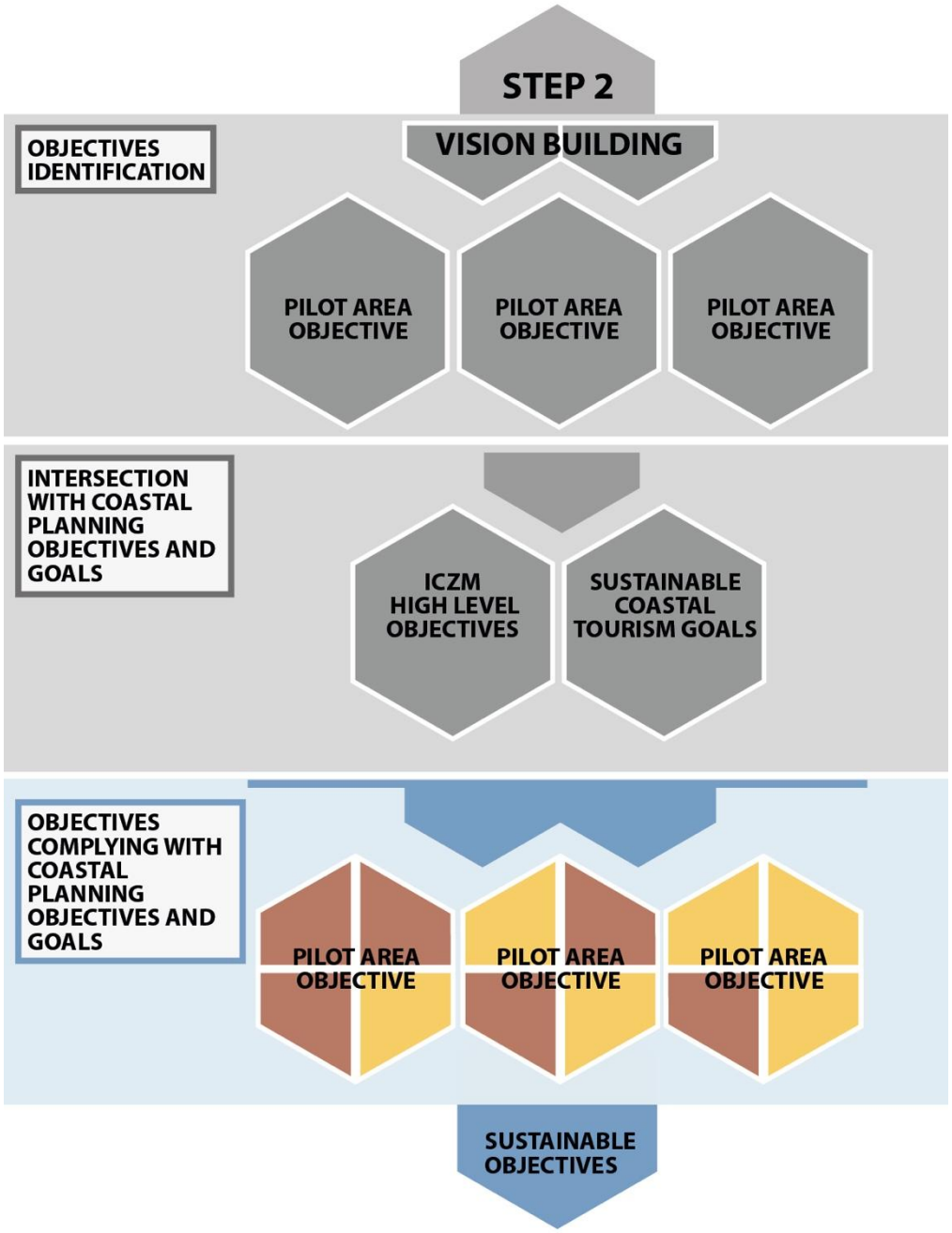
Figure 8: Template of matrix of conformity

OBJECTIVE 1

| Sustainable Coastal Tourism Goal | ICZM High Level Objectives | | | |
|---|---|---|---|---|
| | A healthy and productive economy | A healthy and productive environment | Public health and safety | Social cohesion |
| Energy and water conservation | ● | ● | ● | ● |
| Employment | ● | ● | ● | ● |
| Economic growth | ● | ● | ● | ● |
| Infrastructure plans | ● | ● | ● | ● |
| Environmental and resources conservation | ● | ● | ● | ● |
| Urban and rural revitalization | ● | ● | ● | ● |
| Heritage conservation | ● | ● | ● | ● |
| Consumer protection | ● | ● | ● | ● |
| Community welfare | ● | ● | ● | ● |
| Business creation | ● | ● | ● | ● |

Source: Iuav for Co-Evolve

Figure 9: The objectives identified for the area following the previous steps will be coherent and conform with the visions and objectives at higher scales




Source: Iuav for Co-Evolve

### *2.4. (step 3) - Tourism driven strategic planning construction*


This step aims to develop the longer-term elements for a sustainable tourism-driven development of the area starting from the vision and objectives identified.

The strategy should be a logical output of the preceding steps of the process. The tourism-driven strategy identifies a feasible "trajectory" of change based on the approved objectives and consisting of concrete actions reported in a comprehensive action plan for its implementation. Therefore, the tourism-driven strategic plan is an integrated set of desired and integrated outcomes in which the actions for the realization of them are explained through an action plan. The action plan consisting of a series of management actions aimed at achieving one or more identified objectives. The Action plan, based on the tourism-driven strategy, should depict how the objectives will be implemented specifying the relation of the Plan to the political and administrative organization of the area. Therefore, the action plan must specify:

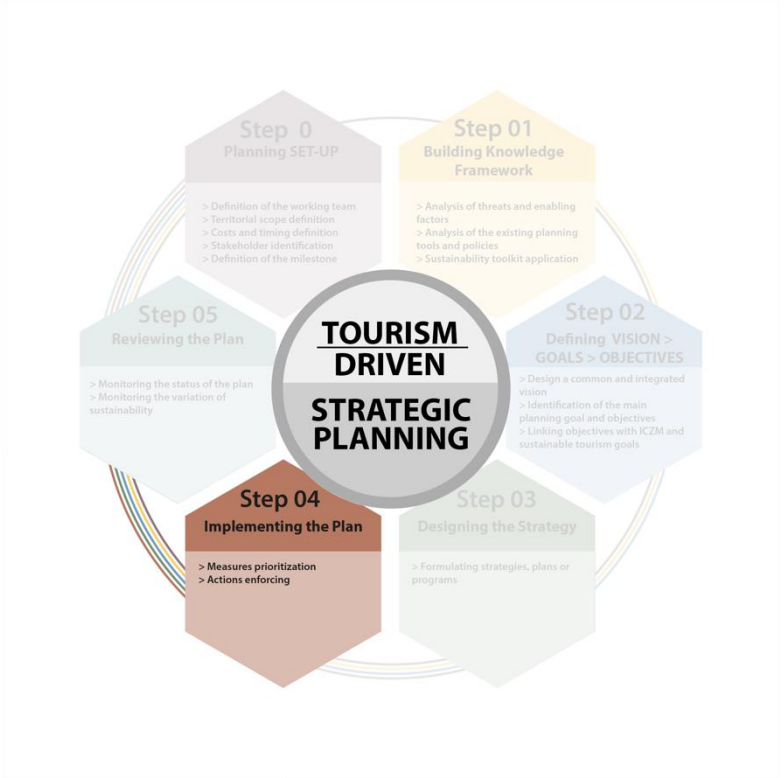
- the objective(s) that are to be accomplished;
- how each objective contributes to the main strategic goals;
- how the objectives will be achieved;
- the connection of the actions with another policies/plans
- the responsibility for actions;
- financial issues (costs and lines of accountability)

## Box 2: Purpose and Characteristics of Action Plans

*Developing and drafting tourism driven strategic action plans is a crucial element of the whole planning process, which explains how selected strategic priorities are to be translated into a series of actions that are expected to bring tangible results. Strategic Actions plans outline the activities to be undertaken, in a step-by-step manner, in order to address some of the priority issues and achieve designated goals. There must be a clear link between each plan and the overall vision, mission, goals and objectives of the selected area. The format of the strategic action plan depends on the nature of the strategic priority issue that has been identified. However, in general terms should provide answers to the following set of questions:*

- *What activities are to be undertaken?*
- *How will each activity contribute to overall vision, mission, goals, objectives and strategic priorities?*
- *What specific results will be achieved?*
- *How will these results be achieved?*
- *When will these results will be achieved?*
- *Who will help achieve these results?*
- *What resources will be needed to achieve these results?*

## 2.5. (step 4) - Implementing the plan




Strategic action planning turns strategies into practical programmes or activities for implementation. Design and implement of strategic action plans depends upon the strategic priorities identified within the second step. As it identifies the key undertakings in consultation with stakeholders while focusing on resources and partnerships, the implementation of strategic actions plans remains fully congruent with the Co-evolve project approach.

All the activities undertaken before in the previous steps – such as the construction of knowledge framework, the definition of vision, objectives and goals, and analysis of issues and priorities – form the basis for realistic and effective implementation of the strategic action plans. Therefore, this step will make frequent references to the earlier stages of the strategic planning process.

In this step, the process of developing and realization of strategic actions will be explained in detail. The contents will be drafted for a specific action area, which may be either a territorial area where a specific intervention is planned, or a thematic area such as housing, environment, safety, or economic development. An action area may also be a crosscutting issue, e.g., environmental pollution, unemployment or poverty reduction.

The purpose of this phase is to apply the strategic approach to priority issues, i.e., on a smaller, more practical scale. Whereas the principles and the process of stakeholder analysis, profiling, appraisal and investment capacity assessment remain the same.

**Box 3: Characteristic of the implementation phase**

*A strategic action plan is an output-oriented, actor-specific plan for achieving the objectives of an issue-specific strategy. It specifies details of inputs and actions by various stakeholders, with practical work programmes, time-schedules, types and timings of financial and other resource commitments. Strategic action plans are keyed to measurable and time-bound schedules of inputs and outputs, and have been negotiated and agreed by the key stakeholders themselves. The implementation step have a few common characteristics that should serve as guiding principles for their preparation:*

*• Problem- or priority-based: they address a specific issue or priority. These could be related to the threats or enabling factors that the area must face. It is important to ensure that any issue of the action plan focuses on will reflect the priorities set by stakeholders.*

*• Realistic and based on achievable actions: the planned activities must be within the competencies and capacities of the stakeholders, and more particularly of the municipality;*

*• Participatory: there should be a clear link between the action plan on the one hand, and stakeholder analysis and participation in the consultation process on the other hand.*

*• Inclusive: Any planned activities must be viewed from the perspective of diverse social groups and must take into account the special needs.*

*• Reliant on local resources: strategic action plans should make the best possible use of the human, technical and financial resources that are available locally.*

*• Tangible and practical: any strategic action plan should clearly define the tangible outputs anticipated and the measures against which progress will be assessed.*

## 2.6. (step 5) - Reviewing the plan


The revision step is one of the most critical planning steps, and is an activity designed to provide constant feedbacks on the progress of the planning process and on the status and efficiency of its implementation. The revision step includes a phase of monitoring and a phase of evaluation.

Monitoring and Evaluation systems can be an effective way to:

- Provide constant feedback on the extent to which the actions are achieving their goals;

- Identify potential problems at an early stage and propose possible solutions;

- Monitor the accessibility of the actions implemented to all sectors of the target population;

- Monitor the efficiency with which the various components of the plan are being implemented and suggest improvements;

- Evaluate the extent to which the plan is able to achieve its general objectives.

The aspect of tourism sustainability can be monitored using the “Sustainability toolkit” and the indicators selected for the specific area in the building framework step (step1). The use of indicators will show the trends of change after the actions’ implementation.

In order to make this step efficient, a specific monitoring and evaluation methodology should be constructed in the preliminary steps of the planning process.

A strategy for the co-evolution of sustainable tourism in Med coastal areas needs to be adjusted over time due to changing goals, changing conditions and ongoing positive and negative impacts.

Box 4: Stakeholders involvement

***The role of stakeholders***

*In order to conduct the Stakeholder analysis it is necessary to define the stakeholders relevant for the tourism driven strategic planning and management process. A stakeholder can be defined as an individual, group or organization that:*

*(a) Is directly affected by one or more issues*

*(b) Has an interest in one or more issues*

*(c) Can influence strategic development (positively or negatively)*

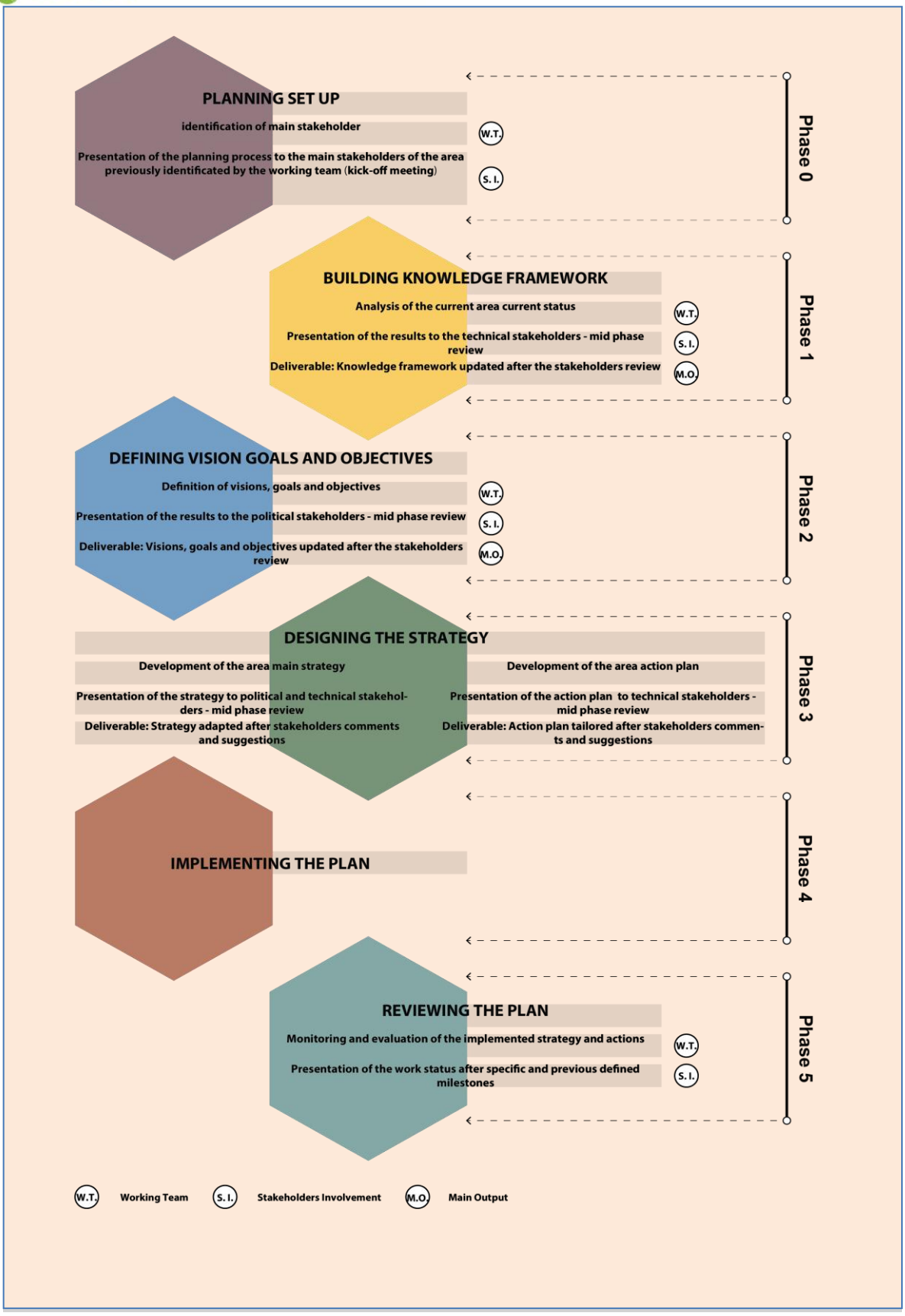
*(d) Has access to, or control of, resources (financial, technical, intellectual) that may be needed to support tourism driven strategic development*

*In the context of strategic planning the list of stakeholders may include, for instance, central government and policy-making bodies, political parties, local government bodies, public enterprises, community based organizations, small business organizations, local and central financial institutions, religious and social organizations, NGOs and donors. This list is by no means final or exhaustive. The final identification of stakeholders depends on the specific situation of a given area or municipality.*

***The Purpose of Stakeholder involvement***

*Stakeholder involvement helps to identify the legitimacy, interest and role of each stakeholder in the strategic planning and management process. It helps to ensure the participation and recognize the needs of groups that are more vulnerable and often marginalized. It also provides an insight into the capacity of each stakeholder to engage in the tourism driven planning process, and helps to define the strategy for maximizing their role. Determining the significance and legitimate interest of the stakeholders has a great importance in achieving two objectives:*

- *Enabling all stakeholders to participate in development decision-making;*
- *Empowering stakeholders to perform their roles and undertake responsibilities for real implementation of the strategical actions*


PLANNING SET UP
identification of main stakeholder
Presentation of the planning process to the main stakeholders of the area previously identificated by the working team (kick-off meeting)
W.T.
S. I.
Phase 0
BUILDING KNOWLEDGE FRAMEWORK
Analysis of the current area current status
Presentation of the results to the technical stakeholders - mid phase review
Deliverable: Knowledge framework updated after the stakeholders review
W.T.
S. I.
M.O.
Phase 1
DEFINING VISION GOALS AND OBJECTIVES
Definition of visions, goals and objectives
Presentation of the results to the political stakeholders - mid phase review
Deliverable: Visions, goals and objectives updated after the stakeholders review
W.T.
S. I.
M.O.
Phase 2
DESIGNING THE STRATEGY
Development of the area main strategy
Presentation of the strategy to political and technical stakeholders - mid phase review
Deliverable: Strategy adapted after stakeholders comments and suggestions
Development of the area action plan
Presentation of the action plan to technical stakeholders - mid phase review
Deliverable: Action plan tailored after stakeholders comments and suggestions
Phase 3
IMPLEMENTING THE PLAN
Phase 4
REVIEWING THE PLAN
Monitoring and evaluation of the implemented strategy and actions
Presentation of the work status after specific and previous defined milestones
W.T.
S. I.
Phase 5
W.T. Working Team
S. I. Stakeholders Involvement
M.O. Main Output

### *Conclusions*

The core purpose of these Guidelines is to assist Co-evolve project Pilot Areas to formulate and redact strategies for tourism-driven co-evolution of coastal areas. These Guidelines have been constructed with the aim of being easily applicable in other areas and to guarantee an efficient planning process compliant with other process and tools present at the different scales.

The recommendations that follow are based on the reflexions we made constructing the above guidelines, emerged also from the literature available about strategic planning and strategic planning in coastal areas.

First of all, in order to construct an effective tourism-driven strategic plan, a coherent policy framework to guide and drive the planning process and the actions defined to reach the main strategy is required. In addition, appropriate bodies to see that the process phases are respected and the policies are implemented is needed. In second instance, the achievement of sustainability objectives aimed at co-evolution of coastal tourism is bound to the construction of objectives consistent with policies, programs and strategies developed at the highest scales. Setting accurate and realistic targets for tourism is essential to develop effective strategies and actions. Coherently with this reflection, the present guideline proposes a methodology of objectives construction that guarantee that the objectives will be conforms with the priorities selected for the Mediterranean area development and with ICZM and Sustainable coastal tourism goals identified. Moreover, recognizing the interrelationship between tourism and other sectors and processes including on the coastal areas will strengthen the strategy identified and its implementation. Thirdly, tourism policies should embrace sustainability aims at the outset. Sustainability should be seen as an objective for all tourism and not be the subject of a separate policy arena. For this reason, the evaluation of the trends of sustainability has been inserted in these guidelines as an essential part of the planning process construction through the use of the sustainability toolkit. The sustainable toolkit allows monitoring the area status in terms of tourism sustainability before and after the plan implementation.

Finally, the role of stakeholders in the whole planning process, shortly reported in a specific box in this guideline, is an essential part of an effective tourism-driven strategic plan and would require more attention and a specific and detailed methodology. As a matter of fact, a primary requirement for governance structures for sustainable coastal tourism is for the effective engagement of different stakeholder interests at all levels from national to local, while clarifying roles and responsibilities and ensuring sufficient capacity to deliver on them.

The guidelines should serve not only to influence developers but also as a reference point for all national and local government bodies and other parties involved in handling and commenting on proposals.

In order to learn more on strategic planning for sustainable development, the document entitled “Guidelines for Tourism-driven strategic planning”, is available in Co-Evolve’s library.

## *Chapter 3: Tourism Sustainability at local scale through Sustainability Index*[4]

Sustainable development has changed the way of approaching tourism development and its impact on tourist destinations, by integrating key factors and dimensions previously ignored. The economic and social performance of tourism activities need to be correlated and co-evaluated with the environmental performance and impacts on tourism destinations in a long term perspective ensuring the conditions of development for future generations.

In this context, the Co-Evolve project aims to establish a common framework or method for defining and evaluating tourism sustainability by creating a conceptual model for assessing the level of sustainable development of tourism in Mediterranean coastal destinations. The model is composed by a system of indicators reflecting the dimensions of sustainability: environment, society, economy and governance. Through simple adaptation, this conceptual model allows comparisons between coastal destinations and is yet flexible enough to highlight the particularities, different needs and priorities of each coastal area.

The key objectives are a) to assess sustainability at destination level and b) to identify the needs and gaps for information and data in order to monitor and evaluate sustainability performance at a destination level. This is based on an indicator system specifically customized for each pilot area in order to inform strategic planning and be used as a reference for future planning activities

In order to assess performance towards sustainability it is obvious that it is necessary to have a basic frame of reference, useful for comparisons among destinations, adjusted to the basic characteristics of Mediterranean coastal tourist areas, as destinations. This is developed in the form of a toolkit.

This process involves three basic steps:

a. Adapt the basic toolkit to the particularities of the area

b. Adopt a tourist destination specific indicator system

c. Establish a monitoring and evaluation process

[4] This chapter has been writtern by Harry Coccossis and Antonia Koutsopoulou, University of Thessaly, Department of Planning and Regional Development, Volos 38334, Greece based on the documents produced in the framework of Co-Evolve project, Deliverable 3.16.2, “Tourism sustainability toolkit”

These are necessary as a frame of reference for actions towards sustainable tourist development.

### *3.1. Adapting sustainability of tourism destinations to local needs*

The Sustainability Indicators Toolkit developed in the Co-Evolve project is a three-tier system composed by the following sets of indicators:

- **Core indicators**: 40 indicators have been selected from the European Tourism Indicator System (ETIS) as they represent typical Mediterranean coastal tourist areas to serve as the basis for comparison of the level and trends of sustainable development.
- **Destination indicators**: a second set of indicators has been developed to address the specific issues of coastal areas according to the characteristics and particularities of the predominant type of tourism activity in each type of destination. Five types of predominant tourist activities have been identified as relevant to most Mediterranean destinations: Beach/Maritime tourism, Urban/Cultural tourism, Cruising, Recreational boating, Nature/Ecotourism.
- **Pilot area-specific indicators**: a third set of indicators has been developed as a frame of reference for area-specific critical issues with specific linkages to the main threats, enabling factors and governance issues identified in Mediterranean coastal areas.

This three-tier system represents an extended and flexible Tourism Sustainability Toolkit that can be customized according to the specific needs and characteristics of the highly diversified Mediterranean coastal destinations. The main goal is to support testing this multilevel system in seven highly diversified Pilot Areas of Co-evolve by answering to the following key issues:

- How to adapt indicators and provide customized toolkits for each destination based on a common methodological framework
- How to manage different types of data
- How to deal with data gaps

As a first approach a list of Priority indicators (P.I.) was selected from the Toolkit which represents the most common critical issues and specificities encountered in Mediterranean coastal tourism destinations (Table 2). The list is meant to act as a ***starting basis*** to be used

for comparisons among coastal tourism destinations in the Mediterranean basin. Once the decision to follow a sustainability path has been adopted at a destination, then the Toolkit can be extended to cover a broader range of sustainability issues.

Table 2: Co-evolve Priority Indicators list

| Indic. Ref. | Core indicators |
|---|---|
| **C.A1.1.** | % of tourism enterprises/establishments in the destination using a voluntary certification/labeling for environmental /quality/sustainability and/or Corporate Social Responsibility |
| **C.B1.1.** | Number of tourist nights per month |
| **C.B2.1.** | Average length of stay of tourists (nights) |
| **C.B3.1.** | Direct tourism employment as % of total employment in the destination |
| **C.C1.1.** | Number of tourists/visitors per 100 residents |
| **C.D1.4.** | Average carbon footprint of tourists and same-day visitors travelling from home to the destination |
| **C.D3.1.** | Waste production per tourist night compared to general population waste production per person (kg) |
| **C.D5.1.** | Water consumption per tourist night compared to general population water consumption per resident night |
| **C.D5.2.** | % of tourism enterprises taking actions to reduce water consumption |
| **C.D6.2.** | % of tourism enterprises that take actions to reduce energy consumption |
| **C.D6.3.** | % of annual amount of energy consumed from renewable sources (Mwh) compared to overall energy consumption at destination level per year |
| **C.D7.1.** | % of local enterprises in the tourism sector actively supporting protection, conservation and management of local biodiversity and landscapes |
| **Destination Indicators: Di.Beach/Maritime tourism** | |
| **Di.A4.** | Number of second homes per 100 homes in coastal zones* |
| **Di.B1.** | % of tourist infrastructure (hotels, other) located in coastal zones* |
| **Di.C2.** | % of beaches awarded the Blue Flag |
| **Di.C3.** | Costs of erosion-protection measures (e.g. sea walls.) |
| **Di.C4.** | Beach nourishment: sand volume and extension of the restored beach (m3 and m2) |
| **Di.D1.** | Existence of up to date tourism plans and policies (YES/NO) |
| **Di.D2.** | Existence of a land use or development plan (YES/NO) |
| **Di.D8.** | Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) |
| **Di.D11.** | Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO) |
| **Destination Indicators: Dii.Urban/Cultural tourism** | |

| | |
|---|---|
| **Dii.A3.** | % of total tourists visiting in peak month and average for the year |
| **Dii.B1.** | Total number of tourists per square Km in key sites (crowding/spatial distribution) |
| **Dii.C4.** | % of sites under a management and monitoring system for protection of cultural sites |
| **Dii.D1.** | Existence of up to date tourism plans and policies (YES/NO) |
| **Dii.D2.** | Existence of a land use or development plan(YES/NO) |
| **Dii.D8.** | Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) |
| **Dii.D11.** | Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO) |
| **Destination Indicators: Diii.Cruising** | |
| **Diii.A4.** | Number of ship visits per year (by month) |
| **Diii.A6.** | Average duration of stay in port (in days) |
| **Diii.A8.** | Average spending per cruise ship visitor (€) |
| **Diii.B1.** | Volume of fresh water on-loaded at port ($m^3$) |
| **Diii.B2.** | Volume of waste accepted for disposal (solid, liquid) at port ($m^3$) |
| **Diii.C1.** | Maximum capacity of docking facilities (number) |
| **Diii.D1.** | Existence of up to date tourism plans and policies(YES/NO) |
| **Diii.D2.** | Existence of Master Plan(YES/NO) |
| **Diii.D8.** | Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) |
| **Diii.D11.** | Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO) |
| **Destination Indicators: Div.Recreational boating (Yachting/Marinas)** | |
| **Div.A2.** | Number of yachts per year (by month) |
| **Div.A4.** | Average duration of stay in port (in days) |
| **Div.B1.** | Volume of fresh water on-loaded at port($m^3$) |
| **Div.B2.** | Volume of waste accepted for disposal (solid, liquid) at port($m^3$) |
| **Div.C1.** | Number of berths and moorings for recreational boating |
| **Div.D1.** | Existence of up to date tourism plans and policies(YES/NO) |
| **Div.D2.** | Existence of a land use or development plan(YES/NO) |
| **Div.D8.** | Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) |
| **Div.D11.** | Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO) |
| **Destination Indicators: Dv.Nature/Ecotourism** | |
| **Dv.A3.** | Total number of visitors to parks and to key sites |
| **Dv.B1.** | Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined |

| | |
|---|---|
| | systems/assets in protected area) |
| **Dv.B5.** | N° of visitors acceptable, according to the capacity of the equipment and facilities of the site (depends on capacity studies establishing limits) |
| **Dv.C1.** | % of site area occupied by rare or unique species |
| **Dv.C2.** | % of endemic species at the site |
| **Dv.D1.** | Existence of up to date tourism plans and policies(YES/NO) |
| **Dv.D2.** | Existence of environmental plan and management(YES/NO) |
| **Dv.D10.** | Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) → P.I. |
| **Dv.D13.** | Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO) |
| **Pilot area-specific indicators** | |
| **P.A1.2.** | % shoreline subjected to erosion |
| **P.A1.3.** | Coastal area in degraded condition (low/medium/high) |
| **P.A1.6.** | Coastal flooding events per year(number) |
| **P.A2.1.** | Land occupied by artificial surfaces within the first 500m of coast (in %) |
| **P.A2.2.** | % of area designated for tourism purposes |
| **P.A3.1.** | Total tourist numbers (mean, monthly, peak) (categorized by their type of activity) |
| **P.A3.3.** | Water use (total volume in liters or $m^3$ consumed and liters per tourist per day) |
| **P.A4.2.** | Rate of loss of protected areas |
| **P.A4.3.** | Percentage of bathing sites with excellent water quality |
| **P.A5.1.** | Total use of water by tourism sector (Tourism as a % of all users) |
| **P.A5.2.** | Energy use by tourism industry as % of total |
| **P.B1.1.** | Existence of a coastal planning management system |
| **P.B1.2.** | Length of protected and defended coastline (km) |
| **P.B2.6.** | Implementation of Natura 2000 management plans |
| **P.B4.8.** | Volume ($m^3$) of sediments dredged per year |
| **P.C1.2.** | % environmental, social, cultural actions recommended in plan which have been implemented |
| **P.C3.1.** | Level of tourism sector involvement in public policy (advisory bodies, review panels etc) |

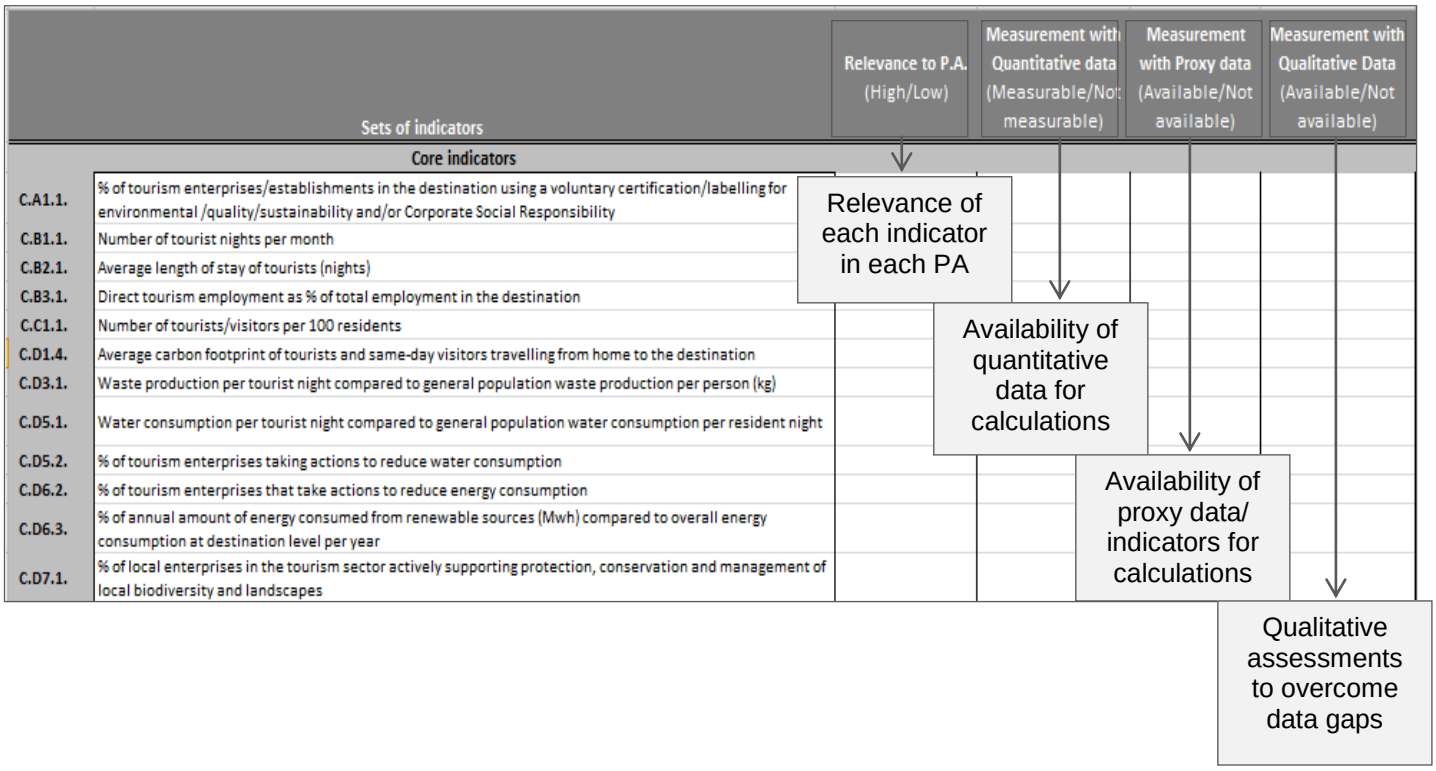
Source: University of Thessaly for Co-Evolve

The process of adapting the indicators and customizing the sustainability evaluation toolkit for each Pilot Area (PA) can be organized in three steps (Tables 3, 4 and 5).

### 3.2. Prioritization of Indicators and Identification of Pilot Area Data Availability

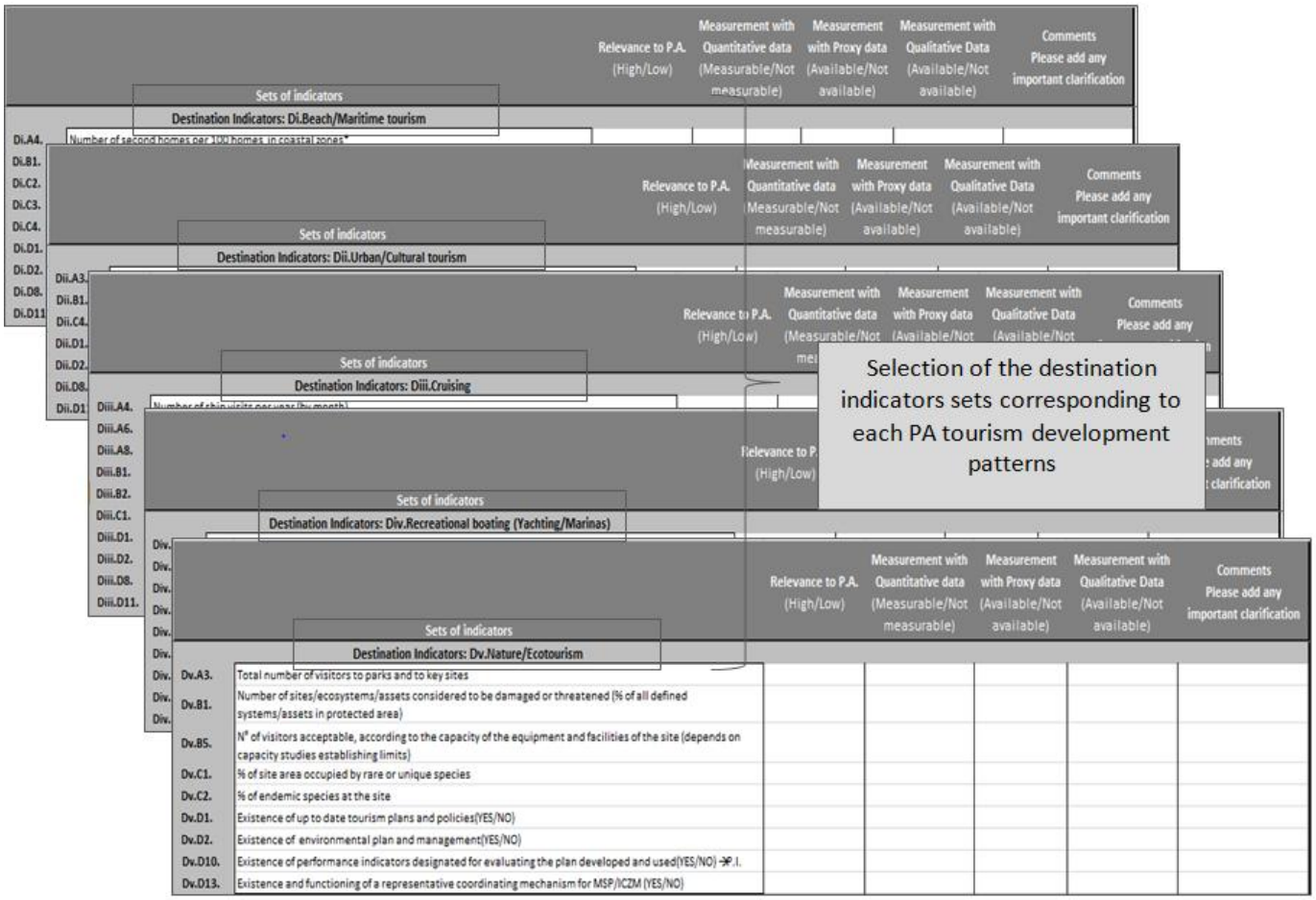
The first stage is meant to ***limit the range of possible indicators and highlight the most important ones that should be measured and monitored in each pilot area*** according to the specific needs and characteristics of each destination as well as to identify the type of available data (quantitative, proxy or qualitative) and highlight important data gaps. At this stage, Pilot Area Coordinators are required to specify the importance/relevance of each Priority Indicator (Core, Destination and Pilot area specific) to their pilot area and further enrich the list with more indicators if necessary. The selection of the destination indicators sets (Beach/Maritime tourism, Urban/Cultural tourism, Cruising, Recreational boating, Nature/Ecotourism) should correspond to the current and future tourism development patterns developed in each Pilot Area.

Table 3: Prioritization of the indicators and data availability review




Source: University of Thessaly for Co-Evolve

## Table 4: List Selection of the destination indicators sets according to PA tourism development patterns




Sets of indicators | Relevance to P.A. (High/Low) | Measurement with Quantitative data (Measurable/Not measurable) | Measurement with Proxy data (Available/Not available) | Measurement with Qualitative Data (Available/Not available) | Comments Please add any important clarification

Destination Indicators: Di.Beach/Maritime tourism

Destination Indicators: Dii.Urban/Cultural tourism

Destination Indicators: Diii.Cruising

Destination Indicators: Div.Recreational boating (Yachting/Marinas)

Destination Indicators: Dv.Nature/Ecotourism

| | |
|---|---|
| Dv.A3. | Total number of visitors to parks and to key sites |
| Dv.B1. | Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined systems/assets in protected area) |
| Dv.B5. | N° of visitors acceptable, according to the capacity of the equipment and facilities of the site (depends on capacity studies establishing limits) |
| Dv.C1. | % of site area occupied by rare or unique species |
| Dv.C2. | % of endemic species at the site |
| Dv.D1. | Existence of up to date tourism plans and policies(YES/NO) |
| Dv.D2. | Existence of environmental plan and management(YES/NO) |
| Dv.D10. | Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) →P.I. |
| Dv.D13. | Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO) |

## Table 5: Pilot Area Specific Indicators and Customization of the Draft Priority Indicators

| | Sets of indicators | Relevance to P.A. (High/Low) | Measurement with Quantitative data (Measurable/Not measurable) | Measurement with Proxy data (Available/Not available) | Measurement with Qualitative Data (Available/Not available) |
|---|---|---|---|---|---|
| | **Pilot area-specific indicators** | | | | |
| P.A1.2. | % shoreline subjected to erosion | | | | |
| P.A1.3. | Coastal area in degraded condition (low/medium/high) | | | | |
| P.A1.6. | Coastal flooding events per year(number) | | | | |
| P.A2.1. | Land occupied by artificial surfaces within the first 500m of coast (in %) | | | | |
| P.A2.2. | % of area designated for tourism purposes | | | | |
| P.A3.1. | Total tourist numbers (mean, monthly, peak) (categorized by their type of activity) | | | | |
| P.A3.3. | Water use (total volume in liters or $m^3$ consumed and liters per tourist per day) | | | | |
| P.A4.2. | Rate of loss of protected areas | | | | |
| P.A5.1. | Total use of water by tourism sector (Tourism as a % of all users) | | | | |
| P.A5.2. | Energy use by tourism industry as % of total | | | | |
| P.B1.1. | Existence of a coastal planning management system | | | | |
| P.B1.2. | Length of protected and defended coastline (km) | | | | |
| P.B4.8. | Volume ($m^3$) of sediments dredged per year | | | | |
| P.C1.2. | % environmental, social, cultural actions recommended in plan which have been implemented | | | | |
| P.C3.1. | Level of tourism sector involvement in public policy (advisory bodies, review panels etc) | | | | |
| ... | | | | | |
| ... | | | | | |
| ... | | | | | |

**Customization of the Draft Priority Indicators List**. Introduction of additional indicators to further highlight threats and enabling factors in each PA.

Source : University of Thessaly for Co-Evolve

### 3.3. Customization of Pilot Area Indicators

Based on the previous stage, separate customized tables are created for each pilot area according to the priority given in each specific indicator, local particularities and tourism development patterns. PA Coordinators are asked to fill in the second-stage tables which are divided in two levels of queries: a) the final measurement/assessment of the selected indicators and relative explanatory information and b) estimations on satisfaction levels in relation to the final measurements and trends evaluation (Table 6). An example of the adaptation process described previously - implemented in one of the Co-Evolve pilot areas (Comacchio. Italy) - is illustrated in Appendix Table A1.

Table 6: Pilot Area Customized Tables – Process and structure

| A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| | Sets of indicators | Priority (High/Low) | Measurement (Quantitative data, Proxy Data, Qualitative Data) | Specify proxy or qualitative indicator | Spatial level | Source of data | Final Measurement | Do you consider this value (final measurement) satisfactory for your PA? | According to your knowledge, what has been the trend of the indicator in the last 10 years (decreasing, stable or increasing)? | If available and only for quantitative data, please specify trend value as ±% |
| | Core indicators | | | | | | | | | |
| C.A1.1. | % of tourism enterprises/establishments in the destination using a voluntary certification/labelling for environmental /quality/sustainability and/or Corporate Social Responsibility | | | | | | | | | |
| C.B1.1. | Number of tourist nights per month | | | | | | | | | |
| C.B2.1. | Average length of stay of tourists (nights) | | | | | | | | | |
| C.B3.1. | Direct tourism employment as % of total employment in the destination | | | | | | | | | |
| C.C1.1. | Number of tourists/visitors per 100 residents | | | | | | | | | |
| C.D1.4. | Average carbon footprint of tourists and same-day visitors travelling from home to the destination | | | | | | | | | |
| C.D3.1. | Waste production per tourist night compared to general population waste production per person (kg) | | | | | | | | | |
| C.D5.1. | Water consumption per tourist night compared to general population water consumption per resident night | | | | | | | | | |

1st level of queries

2nd level of queries

Source: University of Thessaly for Co-Evolve

### 3.4. Development of Pilot Area Customized Toolkits

The customized sustainability toolkits developed within the Co-Evolve project constitute a starting point for measuring and monitoring tourism development in the pilot areas. They also constitute a basic guide for data collection and evaluation on key issues of tourism development.

The toolkits also include the key messages that derive from the evaluation of the available data and the additional information on trends and satisfaction levels provided by the Pilot

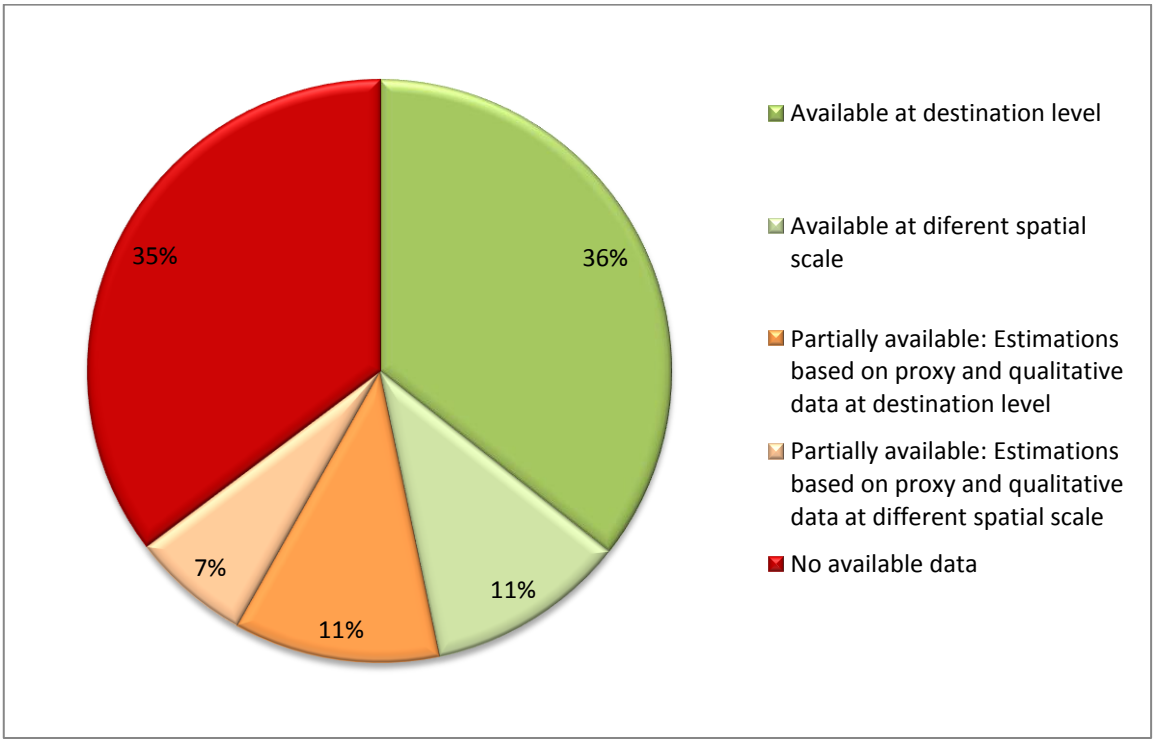
Area Coordinators (see example in Appendix Table A2). At a later stage, it is strongly suggested that each pilot area integrates the complete sets of Core and Destination Indicators presented in Co-Evolve's Priority Indicators List.

### *3.5. Key steps in evaluating tourism sustainability in the Pilot Areas*

The identification of limitations in data accessibility in each pilot area is critical in order to guide future efforts in prioritizing, gathering and monitoring the sustainability indicators. As highlighted through the implementation of the adaptation process in the pilot areas of Co-Evolve (see Figures 10 and 11), data in the selected destinations is not homogeneous and include important data gaps. Only 36% of the required data is available at destination level at present whereas 35% is not available at all. Moreover, there are major inconsistencies in spatial resolution since 18% of the data is available at different spatial scale (municipality or even NUTS3 unit) from which 7% is built on estimations from proxy or qualitative data. Temporal inconsistencies also pose important barriers in cross-cutting analysis among the pilot areas, since most of the PAs refer to different time periods. The assessment of indicators by measuring stakeholders' perception could be considered as an alternative method in order to acquire estimations and further develop and promote the active participation of stakeholders in the planning process.

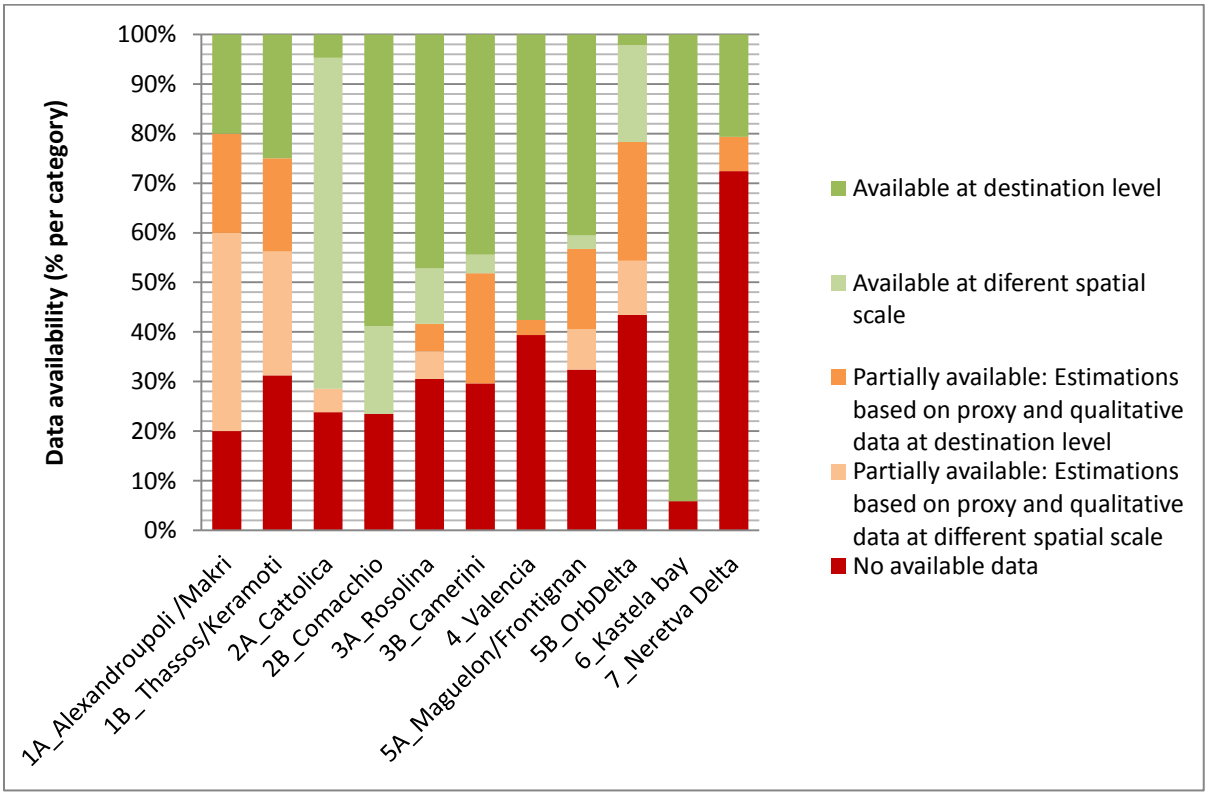
Even in cases where data availability allows for accurate analysis, thresholds still need to be defined in order to assess sustainability at destinations. Since the definition of reference values inevitably involves a scientific and political dimension, special efforts should be given to actively involve stakeholders and experts in the process of determining the limits upon which to implement, evaluate and monitor future activities and tourism policies. Workshops and seminars can act as a starting point towards the integration of stakeholders' perception in the evaluation process.

Figure 10: Pilot Area Customized Tables – Process and structure




**Source: University of Thessaly for Co-Evolve**

Figure 11: Data Availability per Pilot Area




Source: University of Thessaly for Co-Evolve

### *3.6. The use of sustainability indicators in planning*

The proposed framework aims to provide the planning and decision making processes with information to better understand the particularities of coastal destinations, facilitate and promote the transition to sustainability and encourage stakeholders involved in the tourism sector to conduct corresponding policy and management actions.

As demonstrated through the implementation of the proposed framework at pilot areas selected in the context of Co-Evolve, it shows the emphasis on specific types of tourism and the related trends towards tourism development at the destination level, providing hints for either improving existing tourism models or shift towards alterative and diversified tourism development. In addition, it highlights existing data gaps and provides guidelines towards relative measurements in order to acquire the necessary information. Moreover, it indicates ways of measuring and quantifying stakeholders' perceptions and underlines the importance of defining reference values/thresholds through public consultation processes in order to overcome the existing gaps.

The proposed framework will help measure and monitor the sustainability of a destination. By acknowledging that the proposed model is a *system* that reflects the sustainability of a destination and that indicators are interconnected parts of this system, it would be of great value to examine, in the form of probability scenarios, how the system reacts to changes in individual indicators and adjust future planning actions and policies accordingly. Therefore, the proposed framework provides a baseline customized system, which can assist in measuring and monitoring the trends developed at a destination regarding current and planned tourism activities and can be used as a starting point in order to monitor changes in sustainability in the future (short-term and long-term).

In order to learn more on Co-Evolve indicators for sustainable development, the document entitled "Tourism sustainability toolkit", is available in Co-Evolve's library.

## *Chapter 4: Conceptual Framework for MSP in the Mediterranean*[5]

*The conceptual framework's objective is to introduce MSP as the main tool/process for the implementation of ICZM in the marine part of the coastal zone and specifically for planning and managing maritime human activities according to MAP ecosystem approach based goals and objectives, thus contributing to the balance between environmental, social and economic dimensions of sustainable development.*

One of the main objective of ICZM is to "*facilitate, through the rational planning of activities, the sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development*" (Art. 5). Planning is recalled also in other articles of the Protocol, as in the case articles dealing with the protection of wetlands, estuaries and marine habitats (Art. 10) or the protection of coastal landscape (Art. 11).
According to Art. 3 the area to which the Protocol applies (i.e. the coastal zones) is the area between:
• the seaward limit of the coastal zone, which shall be the external limit of the territorial sea of Parties; and
• the landward limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties.

The geographic scope of the Protocol includes both the land and the sea and it follows that planning should be equally applied to both components of the coastal zones. While MSP is a relatively new term within the Barcelona Convention frame, it is clear that planning of the marine space is a concept already taken on board by the Protocol. In this perspective MSP can be considered the main tool/process for the implementation of ICZM in the marine part of the coastal zone and specifically for its sustainable planning and management. Art. 3 of the

[5] This chapter is a compilation of extracts of the two following documents:
- 20th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols, October 2017, "Draft Decision IG.23/7: Implementation of the Integrated Coastal Zone Management Protocol: Annotated Structure of the Common Regional Framework for Integrated Coastal Zone Management and Conceptual Framework for Marine Spatial Planning"

ICZM Protocol also defines the geographic scope of the operational application of MSP that shall focus on the marine area following within the territorial sea of a country. Requirement to take land-sea interactions into account is specified in Art. 6. Also, MSP is considered as one of the tools to implement the EcAp as a strategic approach towards sustainable development in the region that integrates all of its three components, i.e. environmental, social and economic. MSP should guarantee that they are in balance.

Given the definition of the coastal zones in the ICZM Protocol, almost all other Protocols of the Barcelona Convention are related in one or the other way to it. ICZM can and should provide support to the implementation of several of these Protocols, and the relevant objectives and provisions of these Protocols should be taken into account in all ICZM projects, plans and strategies. Given these links, the application of MSP within the framework and the geographic scope of the ICZM Protocol can contribute to the goals defined by other protocols, as in the case of identification, planning and management of protected areas according to the SPA/BD Protocol or the protection of the Mediterranean Sea against pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil (so called Offshore Protocol).

### *4.1. Objectives of the conceptual framework*

The Conceptual Framework on MSP has two main objectives:

• To introduce MSP in the framework of the Barcelona Convention, and in particular link it to ICZM, considering MSP as the main tool/process for the implementation of ICZM in the marine part of the coastal zone and specifically for planning and managing maritime human activities according to EcAp goals (as specifically addressed by section 3 of the CF).

• To provide a common context to CPs for the implementation of MSP in the Mediterranean Region.

The CF is intended to be a short and easy-to-use document, a sort of guiding reference for the implementation of MSP, based on common principles, contents and steps.

### *4.2. The Ecosystem Approach (EcAp) as a guiding principle for MSP*

EcAp is the guiding principle to MAP Mid-term Strategy and the biennium Programme of Work and all policy implementation and development undertaken under the auspices of UNEP/MAP Barcelona Convention, with the ultimate objective of achieving the GES of the Mediterranean Sea and Coast. This also applies to the ICZM Protocol and the related planning of land and sea based marine activities, therefore including MSP implementation.

EcAp can be defined as the integrated management of land, water and living resources that provides sustainable delivery of ecosystem services in an equitable way. It goes beyond examining single issues, species, or ecosystem functions in isolation. Instead, it recognizes ecological systems for what they are: rich mixes of elements that interact with each other continuously. This is particularly important for coasts and seas, where the nature of water keeps systems and functions highly connected. Indeed, links between EcAp, MSP and ICZM principles are wide and articulated (Table 7).

Even the Directive 2014/89/EU establishing a framework for MSP clearly recall the importance of applying the requirement of the ecosystem based approach, both in the preamble and under the article provisions; i.e. Art. 5 “When establishing and implementing maritime spatial planning, Member States shall consider economic, social and environmental aspects to support sustainable development and growth in the maritime sector, applying an ecosystem-based approach, and to promote the coexistence of relevant activities and uses.”

Some guidelines can be suggested to apply EcAp within the MSP process, including the following ones:

• Establish clear links between MSP objectives and ecological objectives, targets and indictors defined within EcAp.

• As far as possible, define the planning and management area considering the limits of ecosystem functioning.

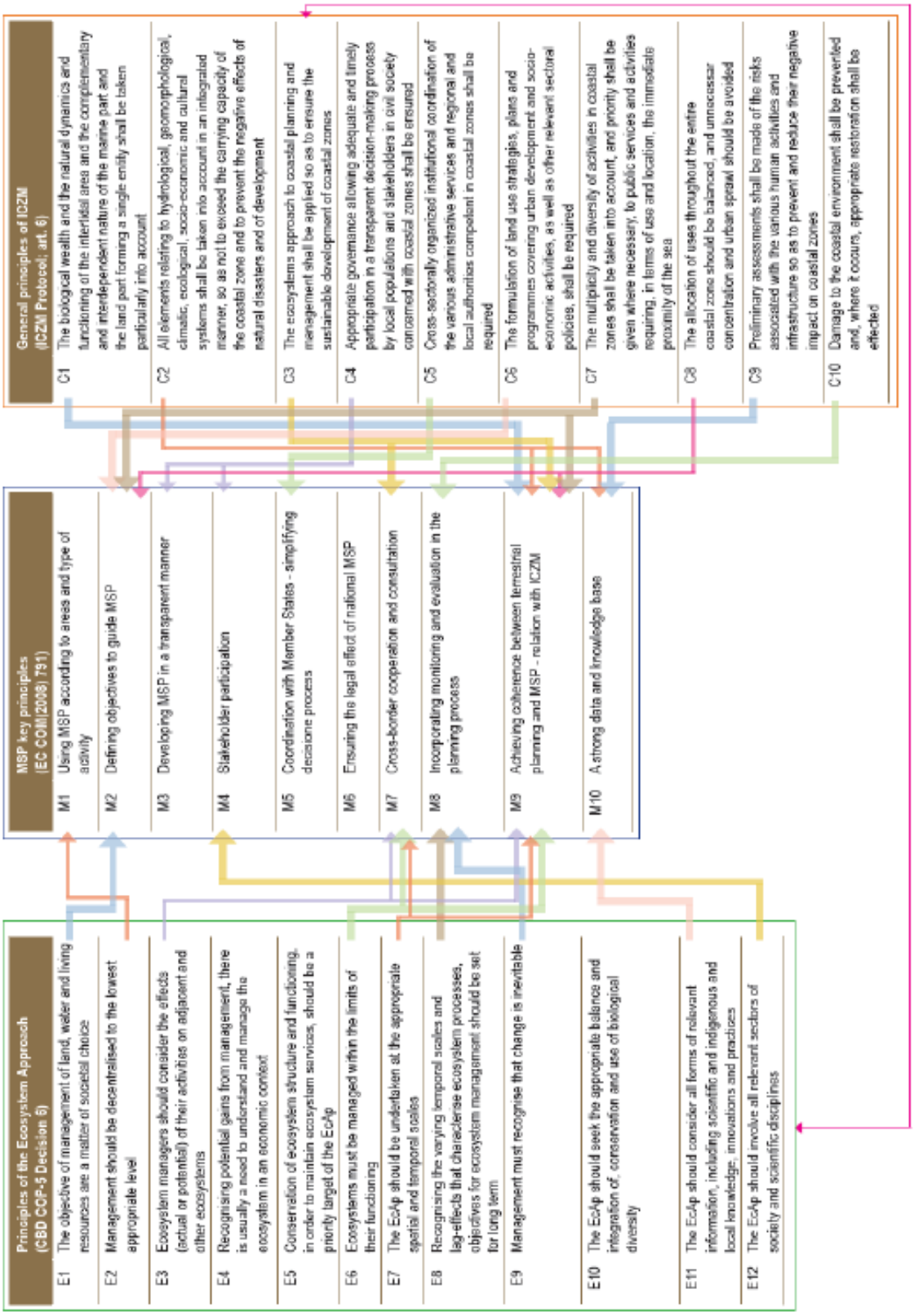
• EcAp does not stop at sea, it involves land too. Taking EcAp in consideration in the MSP process also implies a strong focus on land-sea interactions (LSI) and in particular on interactions among terrestrial and marine ecosystems, habitats and species.

• Establish MSP (allocation of maritime activities) on best available scientific knowledge about the ecosystem and its dynamics, and assess major information gaps and related uncertainties.

• Identify the ecosystem services provided by the considered marine area and how they underpin human maritime activities and human well-being in general.
• Evaluate various effects of human activities on the ecosystem, as: direct and indirect, cumulative, short and long-term, permanent and temporary, positive and negative effects, also taking land-sea interaction in consideration.

• Include in MSP the evaluation of cumulative impacts on the sea that may results from the combination of different (current and future) maritime and land-based activities.
• Capitalize and tailor existing methods and tools to operationalize the EcAp concepts within MSP, as: guidelines for implementation of EcAp, indicators, checklist, vulnerability assessment, evaluation of cumulative impacts, ecosystem service mapping and quantification, identification of blue corridors, EcAp based monitoring and evaluation program, etc.

## Table 7: Link between EcAp, MSP and ICZM Principles




Source: PAP/RAC, 2017

Indeed, the relationship between EcAp and MSP is a two-way relation, as the second can contribute to the overall objective of achieving the GES, also through the identification of related spatial measures. Proper planning of maritime activity can:

• Reduce marine-based source of pressure affecting the marine environment through spatial efficiency and control of temporal distribution of human activities;

• Reduce conflicts between maritime uses and protection of areas with high naturalistic and ecological relevance;

• Identify areas to be protected in order to preserve processes and functions that are essential in achieving the GES;

• Identify environmental hotspot areas at sea where more intense measures are necessary;

• Avoid unsustainable uses in protected areas and identify synergies that can provide win-to-win solutions for socio-economic development and environmental protection;

• Identify connecting elements among relevant habitats through blue corridors.

### *4.3. Common principles and contents*

Available methodologies and scientific literature propose a wide range of MSP definitions. Ehler and Douvere (2009)[6] includes one of the most quoted one, according to which MSP can be defined as "a practical way to create and establish a more rational organization of the use of marine space and the interactions between its uses, to balance demands for development with the need to protect marine ecosystems, and to achieve social and economic objectives in an open and planned way". Another definition very often taken on board is the one given by art. 3 of Directive 2014/89/EU establishing a framework for MSP: "a process by which the relevant Member State's authorities analyze and organize human activities in marine areas to achieve ecological, economic and social objectives". Expected benefits of MSP are:

• Increased horizontal and vertical coordination between administrations and among different sectors using a single process (MSP) to balance the development of a range of maritime activities;

• Reduction of conflicts and exploitation of synergies among different uses of the marine space;

• Contribution to the equitable access to marine resources;

[6] Ehler C., and F. Douvere, 2009. Marine Spatial Planning: a step-by-step approach towards ecosystem-based management. IOC Manual and Guide n. 53, ICAM Dossier n. 6, Paris, UNESCO.

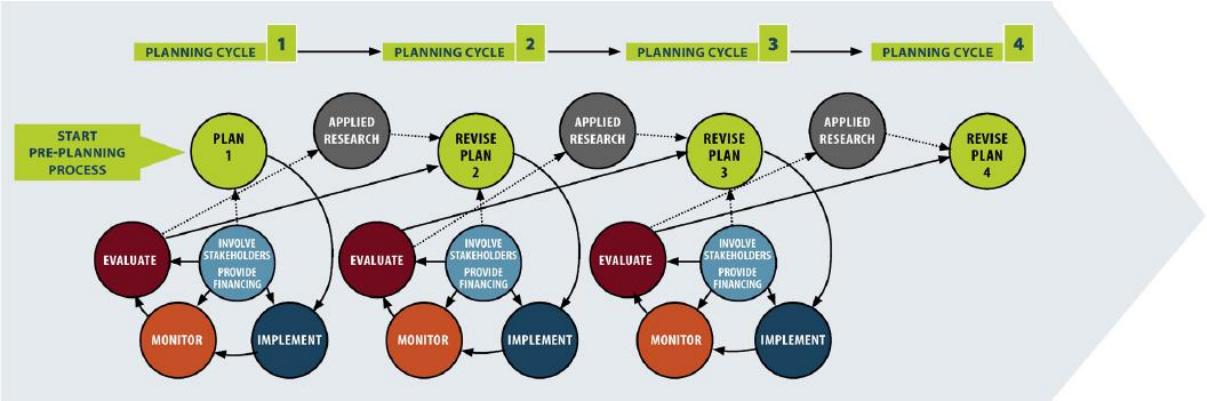
• Increased stakeholder involvement, public participation and information sharing;
• Encouragement of investment, by instilling predictability, transparency and clearer rules;
• Improved protection of the environment, through early identification and reduction of impacts as well as promotion of opportunities for multiple use of the same marine space;
• Identification of (spatial) measures that can support the achievement of the Good Environmental Status;
• Improve protection of cultural heritage and preservation of intangible values of the sea.

Independently on the considered definition and the specific objectives and expected benefits, a number of common principles and general contents for the implementation of MSP are identified below (some of them totally or partially overlapping with ICZM ones). When dealing with MSP implementation this list should be reviewed and tailored according to the specific scope and goals of the MSP process and the characteristics of its area of application.

**a) Adaptive approach**

The adaptive approach is an interactive and systematic process for continually improving policies, plans and management practices by learning from the outcome of previous steps and cycles. Through these approach policies, plans and programmes are identified on the basis of the best available knowledge, and are then implemented, monitored, periodically evaluated and improved based on evaluation results. This approach is particularly useful in dealing with complex, dynamic and uncertain issues, including planning of current and future uses of the sea. Indeed, MSP does not lead to a one-time plan; it is a continuing iterative process that adapts over time. The following guidelines can be suggested to shape MSP according to an adaptive approach:
• Design the MSP process including monitoring, evaluation and revision steps since its beginning;
• Possibly, promote active adaptive management, which includes the evaluation and comparison of alternative hypothesis (e.g. scenarios) about the future evolution of the considered marine area;
• Develop MSP indicators linked to clear objectives and targets, including: governance or process, socio-economic and ecological-environmental indicators;
• Adopt a medium/long-term perspective to properly deal with the strategic and anticipatory nature of MSP and allow to plan, implement, adapt and plan again action over a period long enough to get concrete results.

Figure 12: The iterative MSP cycle




*Source: Ehler and Douvere (2009)*

**b) Multi-scale approach**

The operational application of MSP within the frame of the Barcelona Convention shall focus on the marine area following within the territorial sea of a country, according to the geographic scope of the Protocol on ICZM in the Mediterranean (Art. 3). This operational application can be embedded into a multi-scale approach, combining top-down and bottom-up perspectives. The multi-scale approach includes the following different scales:

• Mediterranean scale addressing the whole sea basin through cooperation among CPs in the frame of the Barcelona Convention to approach the strategic level of MSP, as for example: (i) definition of elements for a common vision and related objectives, (ii) identification of priority areas and issues to be approached at a transboundary level, (iii) identification of initiatives (e.g. projects) to address transboundary areas and issues;

• Sub-regional scale – where relevant and possible – approaching transboundary MSP issues (elements for a common vision, objectives, priorities and initiatives) in sub-Mediterranean regions, also linking to sub-regional strategies and plans (e.g. EUSAIR and the West Med maritime initiative) for coordinated implementation;

• National scale, fully implementing the MSP process – according to common principles and coherently with the Mediterranean and sub-regional approaches – in marine areas falling within national jurisdiction, with particular reference to the territorial sea according to the geographic scope of the ICZM Protocol;

• Sub-national and local scales, fostering MSP applications aiming to provide evidence of concrete and visible environmental, social and economic benefits of MSP. Pilot activities at the sub-national and/or local scale could focus on priority areas, such as: highly vulnerable areas, areas with major conflicts among uses, areas with high potential for synergies among uses and multi-use opportunities. Pilot activities could be also useful to develop and test new

overarching or item-specific methodologies, including through next generation of CAMP projects better integrating marine areas through MSP.

**c) Integration**

Integration is an essential feature of MSP; it can assume different meanings:

• MSP is not only dealing with blue economy. Environmental, social, economic and governance aspects have to be all taken into consideration to pursue sustainability goals;

• Integration among sectors is needed to go beyond sector policies, plans and regulations;

• Vertical and horizontal cooperation among administrations and technical agencies is required to proceed towards coordination and integration of sector policies and plans;

• Integration between land-based and marine planning is essential to harmonize and ensure coherence among parts of the same coastal system, interacting each other in different ways.

**d) Land-Sea Interactions**

Understanding and addressing land-sea interactions (LSI) is crucial to ensure sustainable management and development of coastal areas and coherent planning of land and sea-based activities. Although there is not a single and recognized definition of LSI, they can be defined as “interactions in which land-based natural phenomena or human activities have an influence or an impact on the marine environment, resources and activities and vice versa interactions in which marine natural phenomena or human activities have an influence or an impact on the terrestrial environment, resources and activities”. As a consequence of the above definition, three main levels of LSI should be taken on board when dealing with MSP:

• Interactions related to land-sea natural processes. Implication of such processes on coastal management and planning of alternatives for land and marine activities have to be identified and assessed, considering their dynamic nature. At the same time, human activities can interfere with natural processes, impacting on the coastal and marine environment. The analysis of expected impacts of land and marine activities – within the SEA framework – should include the evaluation of their effects on LSI natural processes and the potential consequent impacts on natural resources and ecosystem services.

• Interactions among land and sea uses and activities. Almost all maritime uses need support installations on land, while several uses existing mostly on the land part expand their activities to the sea as well. These interactions have to be identified and mapped, assessing their cumulative impacts, benefits and potential conflicts and synergies. Interactions between land and sea activities can extend further beyond the coastal zones, for example in terms of long-distance connections related to transport and energy distribution or fish migration up-stream and stemming need for blue corridors. Although the primary focus is on costs,

identification and mapping of those wider connections and assessment of their environmental, social and economic implications is also important. It is important to note that the Art.9 of the Protocol requires that CPs »shall accord specific attention to economic activities that require immediate proximity to the sea«. This is also one of the general principles of ICZM (Art.6 para g).

• Interactions of planning processes and plans for land and sea areas. It is important to ensure that legal, administrative, consultation and technical processes are coordinated (and hopefully linked) to avoid unnecessary duplications, incoherence, conflicts, waste of resources and/or excessive demand of stakeholders' efforts. The challenge is to plan and manage inshore and offshore activities in harmonized manner considering the functional integrity of the land-sea continuum. This also implies allocation of land space (and related infrastructure and services) to some maritime activities (and/or the allocation of maritime space to some land-based activities. Finally, the achievement of this coherence also requires alignment/integration of the different approaches, methodologies and tools applied respectively on land and at sea.

**e) Four dimension of MSP**

MSP operates in three spatial dimensions, taking in consideration maritime uses and related conflicts operating on the: ocean surface, water column and seabed. Time can be taken into account as a fourth dimension. In terms of MSP implementation, this may imply:

• For each maritime use identification of the most relevant spatial dimensions and assessment of the compatibility with other uses that mainly occur in other dimensions (e.g. shipping and sand extraction from the sea-bed);

• Synergies and compatibilities among different uses can also be enabled through temporal zoning and regulation, as for example enabling access to military restricted areas to shipping or recreational activities, if there are not military operations and safety is ensured;

• Proper assessment of the 4 dynamic needs of each maritime use to evaluate whether compatibilities are really possible and conflicts are minimized.

**f) Knowledge based project**

MSP must rely on high-quality data, focusing on key relevant information, as also stressed by EcAp and the adaptive management approach. To this regard the following guidelines are suggested:

• Use best available knowledge to promote the definition of the most appropriate geographic scale and scope for MSP strategies and/or plans, also taking EcAp/IMAP into consideration (i.e. ecosystem limits) and considering LSI an essential element of MSP;

• Focus on the collection of data and information which are really essential for MSP;
• Identify the specific gaps that might hamper the MSP and that require specific actions;
• Take in consideration any form of “good quality” knowledge. This comes primarily from scientific sources and institutionalized monitoring activities and datasets, but should also capitalize private sources of information, including knowledge generated by people living and working at the sea;
• Improve transparent access to accurate and complete information;
• Go from data and knowledge to information really useful for the planning and decision-making process required by MSP. Spatial-based tools are particularly useful to this regard.

**g) Suitability and spatial efficiency**

Suitability of maritime activities and spatial efficiency in distributing these activities are key guiding concepts for MSP, aiming at improving the sustainability of the use of marine resources (including the marine space), minimize conflicts among uses (including nature protection) and exploit possible synergies. To this regard the following guidelines are suggested:
• Use the sea space for those uses which really depend on marine resources or that can be more efficiently operated at sea (i.e. it is worth transferring a land-based use to the sea if this generates higher benefits and lower impacts and conflicts);
• When dealing with planning, start identifying immovable and not-renounceable uses and functions that normally have priority in space allocation;
• Encourage co-use or multi-use of the same marine area as much as possible, provided that this implies higher benefits, lower impacts and reduced conflicts;
• Spatial efficiency should also imply a fair distribution of MSP-related socio-economic benefits in the whole planned marine area.

**h) Connectivity**

MSP does not only focus on proper and efficient spatial allocation of maritime uses, but also deals with connectivity. Improved connections aim to generate social, economic, environmental and governance benefits; the following guidelines are suggested:
• Consider in the MSP plan connections between linear elements as for example shipping lanes to develop an integrated maritime transport system, energy grid to improve energy distribution efficiency or blue corridors to connect natural habitats;

• Consider in the MSP plan connections of patches, areas with similar or interrelated uses or functions as in the case of networking of marine protected areas or the preservation of connected habitats which are vital for marine species;
• Beyond planning of maritime uses, do not forget to create connections among MSP operators in terms of knowledge sharing, cooperation and coordination.

Assessment and planning of connectivity elements is particular relevant for LSI aspects.

**i) Cross-border cooperation**

Although MSP can be seen primarily as a country-based process, cross-border cooperation is essential to ensure the MSP plans are coherent and coordinated across the coastal zones and the marine regions. This implies cooperation at the methodological (common methods, data and information sharing, tools sharing, MSP practice exchange, capacity building), strategic (common vision, shared principles and possible common objectives) and implementation (e.g. planning of marine bordering areas, etc.) levels.

Moreover, it is well-known that a relevant number of problems and challenges (e.g. maritime transport operation and safety, fish stock conservation and sustainable management, biodiversity protection and ecosystem preservation, future development of off-shore renewable energy production and distribution, etc.) have a transboundary dimension and might require the adoption of a common regional or sub-regional approach.

Wanting to know more on the links between ICZM and MSP? The document entitled “The way to a regional framework for ICZM in the Mediterranean 2017-2021” is available on the following address: http://www.pap-thecoastcentre.org/pdfs/SP%20ICZM-MSP_Bgrd%20Doc_draft2.pdf

## *Chapter 5: Participatory techniques*

*There are many participatory methods that can be used when carrying out projects related to the sustainable development of coastal zones. In the context of Co-Evolve, however, two methods were selected because of their relevance: the "Innovation camp" method developed by the European Commission, and the "Imagine" method developed by the Blue Plan and tested multiple times in ICZM projects in the Mediterranean basin.*

### 5.1. The Innovation Camp methodology[7]

The Innovation Camp is a process – a way of thinking and working that aims at producing new insights and perspectives on how to address challenging societal issues. It is a collective process of solution seeking through reframing. During the camp, multidisciplinary groups develop new ideas and perspectives on real-world challenges brought to the camp by challenge-owners: cities, regions, business organizations, universities or NGO's.

Participants from diverse backgrounds, countries and ages work together in extensively self-organizing groups, engaging in a lightly facilitated work process designed to continuously frame and reframe the issues, problems, and assumptions relevant to a challenge. This leads to the creation of a range of new perspectives – new lenses through which the issues can be better understood – and new ways of thinking about and dealing with them. These can then be tested and improved with real-world stakeholders after the Camp. Follow-through takes place at diverse and relevant locations.

The process has been used to stimulate cross-border collaboration, create breakthroughs in understanding complex issues and stuck situations, explore opportunities for collaborative innovation and help eliminate obstacles that block it. It can be used to support the practical realization of Smart Specialization strategies and open innovation initiatives.

Societal Innovation Camps have led so far to new perspectives on issues such as low carbon urban planning, realizing regional test-beds and demonstrators, citizen-government engagement, and enhancing the innovativeness and inclusiveness of society.

#### 5.1.1. Goals and Objectives

Meta-goals of the Innovation Camp methodology are the following:

[7] *This chapter is a compilation of extracts from the following document:*
*Rissola G., Kune H. and Martinez P., Innovation Camp Methodology Handbook: Realising the potential of the Entrepreneurial Discovery Process for Territorial Innovation and Development, EUR 28842 EN, Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-74613-0, doi:10.2760/924090, JRC102130.*

- Creating collaborative societal innovation to create value for the common good.
- Supporting a mind-set change to stimulate a culture of innovation.
- Understanding how self-organizing processes can engage stakeholders to take responsibility for change.

Besides, the methodology has a certain number of objectives which are:

- Engaging a wide diversity of stakeholders in addressing a complex issue or challenge.
- Involving all/most important actors who are driving forces in the situation. Important policy makers must be on board, otherwise effective follow-through is difficult, if not impossible.
- Building shared understanding on societal issues.
- Inspiring participants, de-constructing prejudices, misconceptions, and assumptions and getting into other stakeholder's shoes.
- Leveraging collective/distributed intelligence to tackle common issues.
- Inspiring the Challenge Owners with new ideas and perspectives.

The organizer and key stakeholders get a different perspective on what the challenge actually entails. Looking at the challenge-as-given through different eyes, a shift in mind-set, sometimes even a paradigm shift, becomes possible, opening new ways of addressing the challenge, the stakeholders, the strategies and plans for action, and eventually even the process of implementing good solutions.

5.1.2. Distinctive Features

a) The Camp is not a workshop, brainstorming session, seminar or training!

- Camps bring stakeholders together to conceive new projects, solutions or interventions, at the start of a project to clarify issues at the 'fuzzy front end', or when a project hits a wall, becomes stuck, or needs alternative perspectives on how to move forward.
- Camps create conditions for self-organized solution-seeking. A facilitator is present, but does not lead the activities or dictate their sequence. Group processes have a structure, but this is co-created by the group members – in negotiation with their facilitator – themselves.
- An Innovation Camp does not deliver magic solutions to complicated or complex issues in a 2 or 3-day period. It does build better understanding of how these issues

work in their societal context – and how they may more effectively be addressed through potential solutions that are shaped or prototyped during the Camp, for further feasibility check, refining and testing.

b) Camps are an iterative process, in which preparation, face-to-face camping, and follow-up – where promising ideas are tested in the real world – are all parts of the same innovation process.

- The time spent at the face-to-face camp is only one part of the process. Preparation is essential for an effective camp, and the follow-up in the 6-9 months after the camp is the true test of the Camp's effectiveness.
- Innovation camping is an iterative process, which means that challenge definitions, promising ideas, possible solutions, and prototypes are continually questioned, tested for relevance and improved – in every phase of the process.

c) Emerging insights about what the challenge(s), problems and issues are, then constantly reframing & redefining them.

- Dedicated workgroups address societal or organizational 'challenges' but don't accept them as given. The first task in any workgroup is to understand what the real challenge is – the problem-behind-the-problem, the issues-behind-the-issues, the context-behind-the-context).
- The second task is to reframe the challenge, problems, issues and context in many different ways, to come up with (new) perspectives that the challenge owner has not (seriously) considered before.
- Even when promising prototypes have been developed, and are being tested in the real world, the same reframing/redefining process prevails.

d) Self-organizing work process, within a facilitated framework.

- Groups are expected to organize their own work processes within the Camp program. Self-organizing means that each group – in negotiation with its facilitator – will follow its own process and timing to work through the main activities of the Camp.
- This program has a few fixed plenary moments; most of the time is for hands-on work, following a 5-phase structure:

  1. Exploring the challenge

2. Exploring the opportunities
3. Generating and combining promising ideas
4. Creating initial prototypes
5. Thinking forward (6 weeks / 6 months / 6 years).

e) The facilitator's role is to support the group in working effectively.

- Depending on a particular group, this may mean 'doing less', not doing more. This implies light facilitation, few interventions, and 'getting out the way' when the group (or subgroups) are working well. Helping the group to orchestrate their time and to keep track of where they are in the process is often the most important thing a facilitator can do to move the group forward.
- Facilitators are always available for their group, but do not necessarily stay the entire time in the group's workspace – this is part of 'getting out of the way'!

f) Prototyping promising ideas (not just talking about them).

- Prototyping means taking the 'best guess' at a given moment and testing it with other people, ideally with real stakeholders and potential users. A prototype is always work-in-progress; and all ideas can be seen as prototypes, from their initial creation to – ideally – well after they are eventually implemented in practice. Learning-by-doing, experimentation, and co-creation with other people are all essential parts of the camp process. A comparable term to prototyping that is used in agile design is Proof of Concept (PoC) 9,1 that is a realization of a certain method or idea in order to demonstrate its feasibility, or a demonstration in principle with the aim of verifying that some concept or theory has practical potential. A proof of concept, like a prototype, is usually small, and may or may not be complete.

g) Participants: community building, stakeholder engagement, involving networks of networks.

- It has become a cliché that the best ideas are not necessarily in your own organization, network or workgroup. For Innovation Camps to be truly effective, they should involve people from the wider community and engage both direct and indirect stakeholders in the solution-seeking process.

- This means that participants should be drawn from this wider community, and include not just 'challenge insiders' and content experts, but potential users and end-users, and others who are part of the challenge ecosystem. They should come from the Quadruple Helix (government, academia, civil society, industry), and workgroups should ideally have people from each strand of the helix involved.
- Diversity in culture, country, city or region, generation and gender is also important. This adds a variety of perspectives to the mix, and helps support groups in considering new perspectives.

h) Thinking in output, outcome, and impact.

- Camps ask participants to 'think in time' and consider different timeframes for judging the effect of the prototypes and promising solutions they propose: Output: the results achieved at the end of the face-to-face camp.
- Outcome: the expected/intended outcome that can be felt/ measured in the real-world after ideas are realized in society. Depending on the nature of the outcomes, these are usually observable only after 18-24 months.
- Impact: the impact that the ideas will have in a longer run (e.g. 5-6 years) after being realized in society.
- In order for output to become outcome and lead eventually to impact, specific steps must be taken in the first months after the camp. The Camp requires that groups consider a possible 'roadmap' for these 6 weeks and 6 months.

i) Simple, easy, accessible, enjoyable.

- Camps deal with serious issues, but the camp process itself is designed to be simple to understand, easy to do, accessible to people of different cultures and backgrounds.
- Nevertheless, participants often feel lost during the first third of the camp. This is because many participants are only familiar with more controlled and structured processes, and don't have experience of how self-organizing can be successful in solution-seeking. However, being lost is part of the camp process, and it should be emphasized in briefing participants and pointed out by the facilitators.
- The camp process should be enjoyable. Having fun – even when dealing with serious issues – is a hallmark of creativity and enhances openness and innovative processes.

j) Effective and affordable.

- The Innovation Camps are an effective and affordable way to clarify intentions and points of view when diverse stakeholders must pay attention to creative positive change in their environment, region or territory.

k) Rapidity ➠rapid prototyping, rapid realization. Going faster than you think possible.

- Many factors can contribute to making things go slowly: the perceived need for thorough analysis, the desire to avoid risk, the assumption of deep differences among stakeholders, or the perception that required procedures stand in the way of experimenting with new ideas in practice.
- These perceived differences are themselves often a challenge to achieving real change in both the public and private sector.
- Through the Camp process, organizations are encouraged to be 'rapid' – looking for opportunities to test and experiment, going faster than they usually go, or that they think (in first instance) to be possible.

l) Rapid realization: moving good ideas from post-it to prototype to project in 9-12 months.

- It is often said, "In Europe, people talk too much and do too little," while in North America there is a stronger emphasis on doing things quickly, to find out if they actually work. This action-learning approach can be learned by doing it in practice.
- Once ideas have been tested and improved in an iterative (prototyping) process, they can be realized in practice: in experiments, pilots, or other projects which – when successful – can be scaled to larger programmes and to other places.

5.1.3. Results: Output of the Camp

In the Camp, groups work to develop new perspectives for thinking about and addressing the Challenge, and plans for testing and improving these ideas in practice.

In the terminology of the Innovation Camps, the output of the Camp will be an initial prototype: a first concept or model, tangible or intangible, of a solution that addresses the chief questions of the challenge in an effective way.

The intention is that this idea for a solution – a prototype solution – will be tested in practice after the Camp, to allow for many possible improvements.

In cases where the challenges are complex social issues involving different actors of the quadruple helix, the prototype will not be a full solution, but a reframing/redefinition of the

challenge, with proposals with objectives, indicators, and a road map, possibly also a work program (with possible lines of action) that should be explored by the organizations that "own" the challenge, in collaboration with relevant actors in the challenge ecosystem.

In this sense, tangible Camp results – for each group – will be:

- A prototype. First ideas for a new service, strategy, work process, product or policy.
- Plans – a kind of roadmap – for how to move forward in the next 6 weeks and 6 months.
- A description of what the world will look like 6 years later, if the results have been implemented in practice.

Depending on the challenge brought to a Camp, the results may take other forms; for example, a set of "scenario's" describing how a sector, a city, region or country will look in the future.

Successful camps produce more than these tangible results. Of great importance are the insights, new perspectives on dealing with a challenge, the mind-set changes about what the real challenges actually are, and how to think about and handle them in real life.

These new insights, paradigm shifts and new ways of thinking are in many ways the main output of an innovation camp. Ideally, they are built into one or more of the prototypes each group produces. The prototype is important because it is a vehicle for showing the new insight in a way that it can be understood, grasped and implemented in practice.

More information on this methodology with a very detailed step by step process on how to implement it are available on the following link: http://s3platform.jrc.ec.europa.eu/documents/20182/198909/Innovation+Camp+Methodology+Handbook/3e201fe6-ff13-429d-8105-a09140eb1dd7.

## 5.2. "*Imagine*" methodology[8]

ICZM is a process which implies, in particular, to think collectively about possible futures, taking into account past developments and the current situation of the areas under consideration. Indeed, a common reflection, involving the different local actors, is a crucial stage of the process: it facilitates a collective evaluation of the heavy trends and mechanisms at work in the coastal zone; it allows to examine the long-term consequences of the actions undertaken today, and thus to seek alternative ways to move towards a desirable future. That's why the Blue Plan has developed the "*Imagine*" approach which proposes a set of tools and methods to describe, evaluate and explore the level of sustainability of an eco - socio-system in the past, the present and the future, by means of indicators, and in a participative approach considering the actors as experts at their level.

The "*Imagine*" approach was therefore conceived with the objective of contributing to the establishment of an ICZM process in the Mediterranean through the participation of stakeholders in a prospective reflection on the future of the sustainability of their territory. The expected results of this reflection include a description of what would be a desirable future and the actions to be taken to achieve it. They also include a set of sustainability indicators that provide a scorecard for tracking the region's progress towards sustainable development.

The "*Imagine*" approach has been used in coastal area management plans in Malta (2000-2002), Lebanon (2002-2003), Algeria (2003-2004), Slovenia (2005), Cyprus (2007) and Spain (2010), as well as in a coastal plan in Algeria (2014).

2.1. Process and characteristics of the "*Imagine*" approach

The "*Imagine*" approach was developed specifically so that Plan Bleu's contribution to the sustainable management of Mediterranean coastal zones is optimal both in terms of results

[8] *This chapter is a compilation of extracts from the following document tranlated in English: Élisabeth Coudert et Mohamed Larid, « IMAGINE : un ensemble de méthodes et d'outils pour contribuer à la gestion intégrée des zones côtières en Méditerranée », VertigO - la revue électronique en sciences de l'environnement [En ligne], Volume 7 Numéro 3 | décembre 2006, mis en ligne le 15 décembre 2006, consulté le 22 février 2018. URL : http://journals.openedition.org/vertigo/9059 ; DOI : 10.4000/vertigo.9059*

(exploring long-term relationships between environment and development) and in terms of production of these results (that is to say by conducting a transversal work involving all the actors and all the activities on a territory). Nevertheless, the "*Imagine*" approach is an approach that could be used in any territory, or even in organizations or institutions, as long-term strategic thinking is engaged by mobilizing multiple actors on a complex issue.

The implementation of the "*Imagine*" approach follows a process that takes place in four phases (Figure 13). Each phase is punctuated by one (or two in the case of phase 3) workshop which brings together all the participants in the process. The workshop is the privileged framework for the animation of the work in thematic groups and for the synthesis of the debates. Inter-workshop periods consolidate the results obtained and prepare the rest of the work to be done.

The four phases of "*Imagine*" break down as follows:

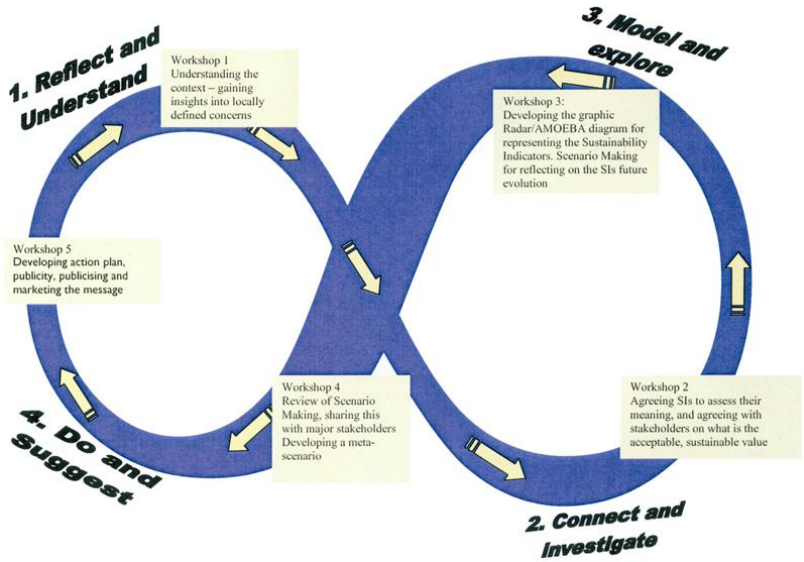
a) Reflect on the system and understand it;

b) Link the understanding of the system to sustainability indicators, study them, establish the equilibrium band and represent them using AMOEBA;

c) Model and explore through the scenario method the future of the studied territorial system;

d) Suggest and act by establishing an action plan for sustainable local development, including monitoring the progress of the territorial system towards sustainable development through changes in the values of the indicators in relation to the sustainability thresholds.

Figure 13: The four stages of "*Imagine"* approach

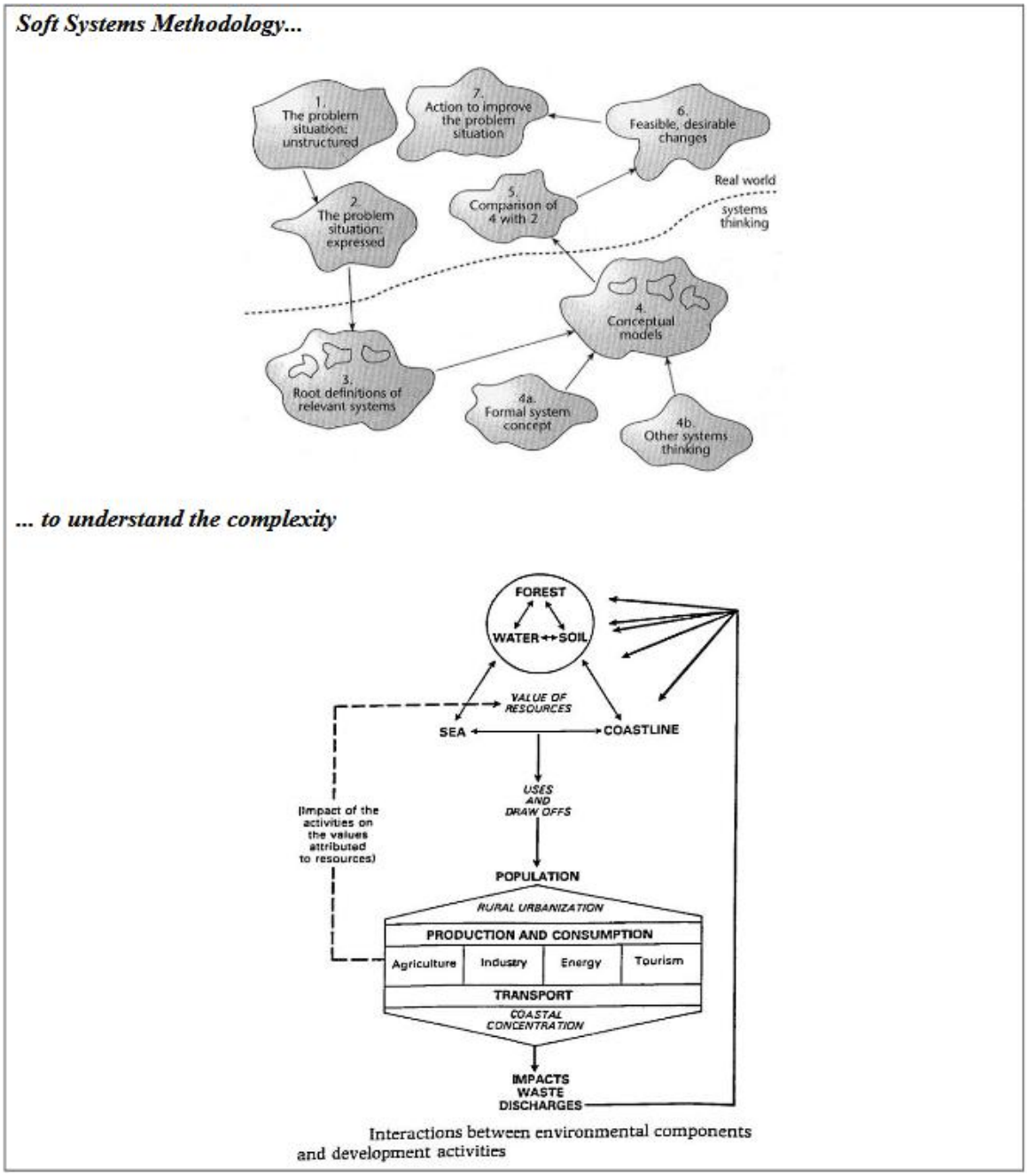



Source: Plan Bleu, 2006

The symbol of infinity is the logo of "*Imagine*" to the extent that any territorial project is in perpetual becoming. Once structured and implemented, it must, sooner or later, be evaluated, updated and revised. The symbol of the infinite suggests that one could, to do this, re-use the "*Imagine*" approach by going through its four phases again. This re-use has not yet been realized by Plan Bleu, as the projects currently completed have not yet reached a sufficient degree of maturity.

The "*Imagine*" approach relies first and foremost on the systemic analysis that makes it possible to understand a complex situation in its entirety and make it intelligible. The analysis of the relationships between the components of the environment, population and development activities is based on the flexible systems methodology (Checkland and Scholes, 1990). The systemic mode of thinking facilitates the understanding of the complexity of reality and allows a simplified representation which can then be manipulated by making different assumptions of evolution. It enriches the understanding of the entity offered for observation (Figure 14).

Figure 14: Systemic analysis




Source: Checkland (1981) and Plan Bleu (1989)

The "*Imagine*" approach is part of this methodological framework which has the advantage of bringing together, on the one hand, a certain number of formalized tools to produce knowledge and, on the other hand, a procedure, a logical sequence of steps for a group of actors involved in a complex issue (here territorial and coastal) to achieve a common and structured vision of a desirable and feasible future. "*Imagine*" allows to:

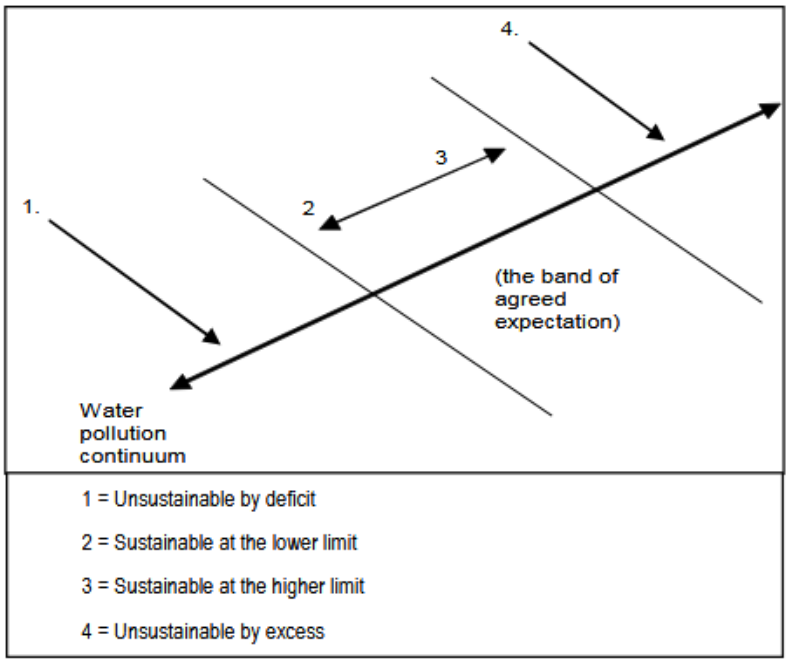
- describe by simplifying a reality or a complex phenomenon,

- acquire a detailed knowledge of the elements of the system and their interrelations as well as their weight in the potential changes of the system,
- understand which actors control these elements,
- identify heavy trends, constraints, ongoing processes and the seeds of change.

In addition, and in order to establish a common framework for the appropriation of a territorial problem, "*Imagine*" associates from the beginning of the process the greatest number of possible actors, by mobilizing representatives of the social and technical-administrative categories relevant for the future and the management of the zone. This participatory approach relies on the expertise of local actors and allows them to design their own territorial project. It promotes not only the involvement of stakeholders in a project relevant for their future, but also the decompartmentalization between disciplines, the cross fertilization between many points of view and the resolution of conflicts between different objectives. Thus, the workshops implemented in "*Imagine*" bring together actors from different sectors and of different types (public, professional, associative, etc.) and give them the opportunity to understand each other by reflecting together on their common future.

The use of indicators and the evaluation of a sustainability threshold for each of them is another feature of "*Imagine*". The project's stakeholders, in joint reflections during the workshops, select the key indicators that seem most relevant and reliable, the group dynamics reducing the "subjectivity" of each expert taken separately. In the framework of Co-Evolve project, indicators have already been defined in the studying phase (output 3.16.b). Though, "*Imagine*" could be the occasion for the group to estimate the minimum and maximum values that the indicator can achieve. It would then evaluate the ideal value which constitutes the maximum point of durability of the indicator. Finally, it could establish an equilibrium band that frames this value, that is to say the durability interval between the upper durable value and the lower durable value of the indicator (Figure 15).

Figure 15: The band of equilibrium




Source: Plan Bleu, 2006

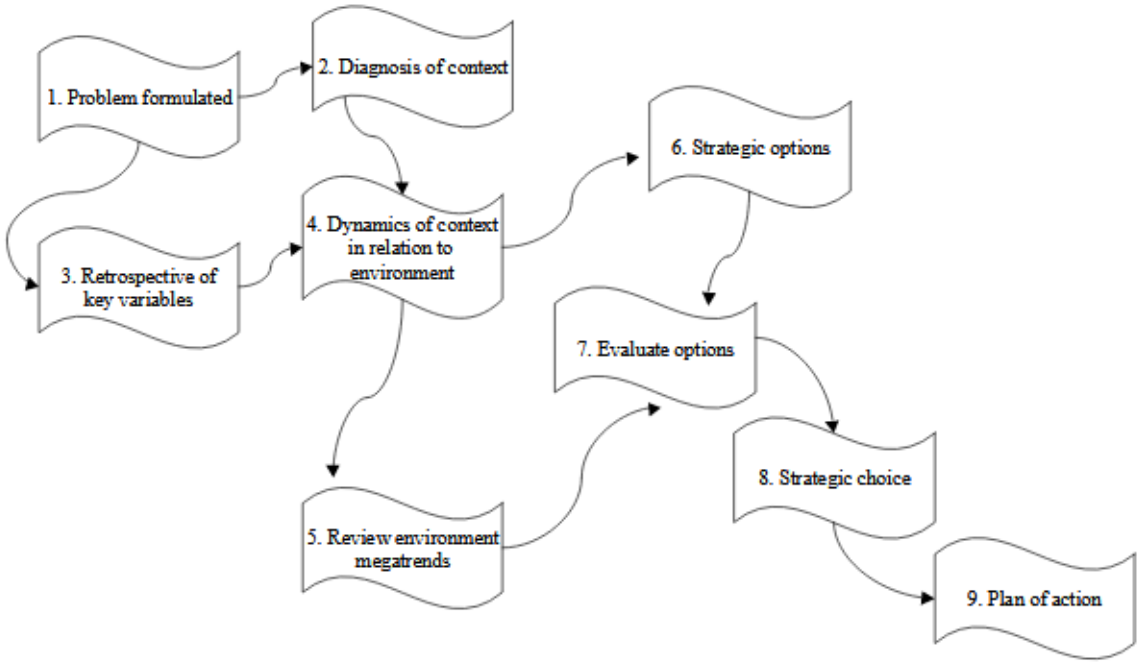
An AMOEBA or Radar graph is used to display all the indicators simultaneously, allowing their position to be compared with the band of equilibrium and an image of the system's overall sustainability. In an ideal vision of sustainability, all indicators should fall within the band of equilibrium. Any deviation, in deficit or in excess, shows an unsustainable occurrence of the value of the corresponding indicators and to the decisions giving rise to such deviations being scrutinized and solutions sought which would allow the indicator value to be brought back inside the band of equilibrium sustainability.

Once the system has been recognized and the indicators and their sustainability thresholds defined, "*Imagine*" uses prospective analysis tools to explore the future, which can still be imagined albeit not identified as such. Indeed, drawing on knowledge of past trends and the current situation acquired during the preceding stages of "*Imagine*", the stakeholder group can design possible and/or desirable futures. The scenario method, one of the best known tools in prospective analysis, is based on the choice of evolution hypotheses, a time horizon and the elaboration of a pathway from present to future using "If...Then" type reasoning. The stakeholder group is thus able to look ahead and explore what might happen if a given decision were taken in order to establish a final image of the area in question: if nothing changes, this is a trend scenario; if action is taken then one or several alternative scenarios emerge.

The aim is "to enlighten the action in the light of possible futures" as Michel Godet says, distinguishing the phase of prospective consideration as such, which seeks to answer the

question "What might happen" and the stage of preparing to act, where the question is rather "What can be done?", followed by "What are we going to do?" and finally "How to do it?". Combining the scenario method with strategic thinking allows potential future changes within the system to be imagined by projecting past trends using various hypotheses of evolution, as well as the identification of action to be taken in order to reach possible and desirable situations. A logical multi-step sequence produces the action plan, from formulating the problem through to making the strategic choices (Figure 16). A degree of similarity exists between the four stages of "*Imagine*" (Figure 13) and those of strategic prospective analysis. We note a certain similarity between the four phases of "*Imagine*" (Figure 13) and the stages of strategic foresight: it is quite normal since the first is the daughter of the second.

Figure 16: Strategic prospective analysis




Source: Plan Bleu (2006) (adapted from Godet, 1997)

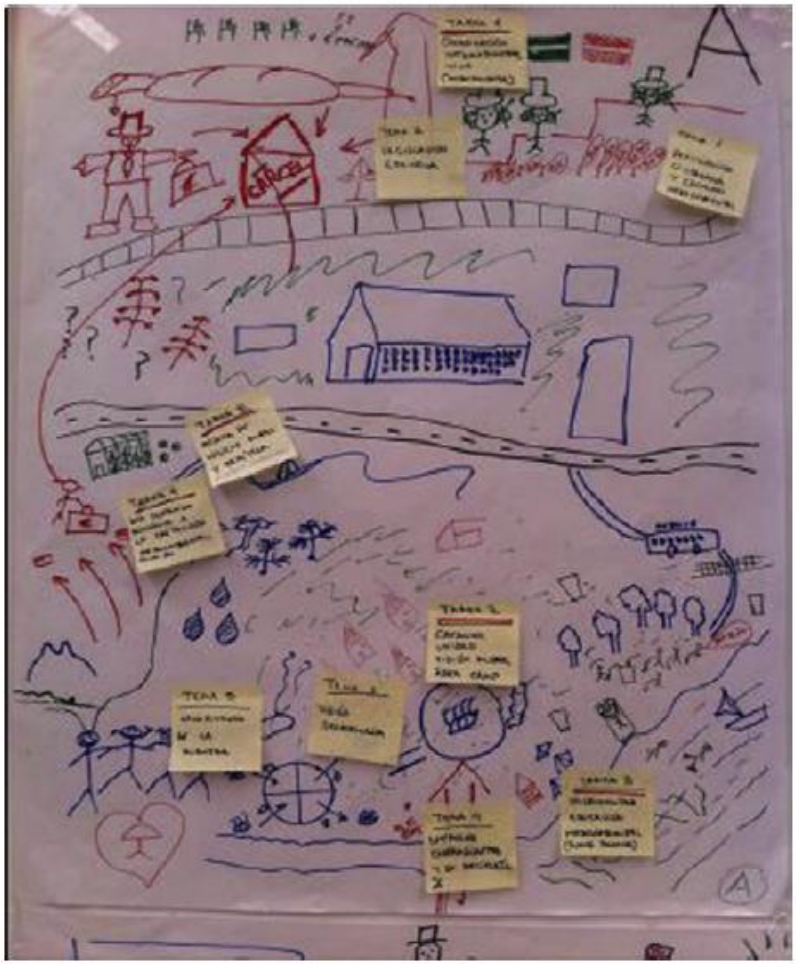
Brainstorming within the group of stakeholders involved in the local sustainable coastal management project allows the long term consequences of individual projects to be explored and contradictory objectives or conflicts over the use of resources between the various projects identified. By focusing on sustainability issues within a coastal zone it provides a powerful tool towards consistency.

2.2. The implementation of Imagine: the experience of Almeria's coastal zone (Spain)

a) Reflect on the system and understand it

In this first phase, fertile images (Checkland et al., 1990) are used to allow participating actors to graphically represent complex situations and begin to understand them. The fertile image helps to summarize the actual situation perceived by the actors, in a form of free cartoon style drawing. It is a schematization style that works both as a means to break the ice and to scan all elements of the system and their relationships. The following rich picture (Figure 17) has been elaborate in the framework of Almeria's coastal area management plan.

Figure 17: Rich picture elaborated during Almeria's coastal area management plan



Source: Bell, Correa Peña and Prem (2013)

The rich picture lays the foundations for subsequent work. The priority issues relating to the situation can be inferred from it, as well as the main action to be taken in order to remedy them. Participants attach the indicators which best describe them before subsequently drafting a statement explaining the aim of the territorial project in respect of these issues and tasks. A collective vision is thus established of the objectives to be reached, constraints to be overcome, the stakeholders and beneficiaries of the desired change. Participants are then in a position to pool these elements to shape the project, thereby ensuring a high degree of consistency amongst the objectives.

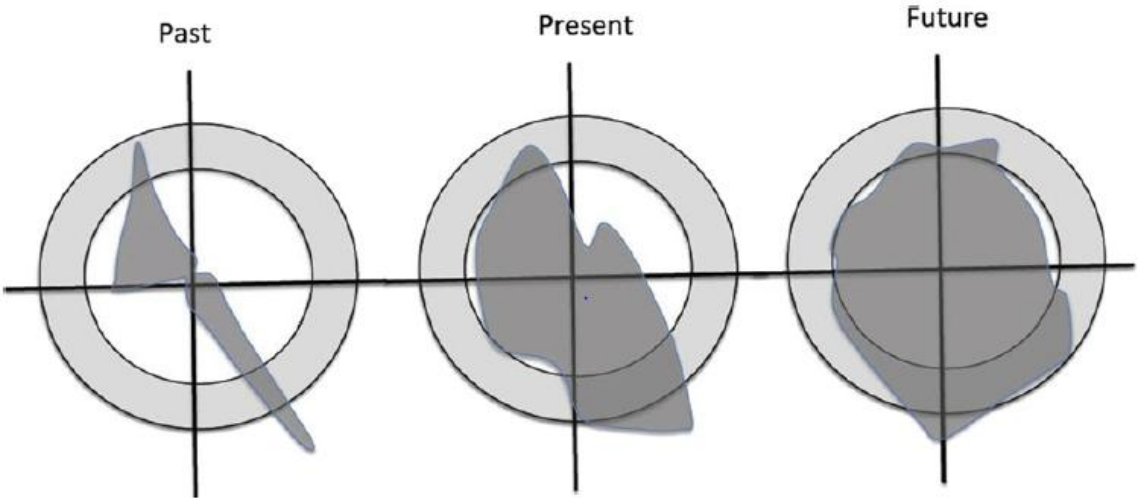
b) Connect and investigate

During the second stage, participants determine the ten to twenty key indicators which are representative of the system; then they establish the indicators' band of equilibrium and plott them on an AMOEBA graph in order to show the system's sustainability at some given date. To facilitate selection of the key indicators, participants may draw up a feasibility grid in order to check that the proposed indicators can actually be calculated, that the data is available and accessible, etc.

In the case of the "Almeria's coastal zone" CAMP, the 11 key issues which were selected are as follows:

- Renewable power in the region
- Active public engagement in proposals for sustainable development
- Waste recycling
- Urbanization
- Education of young people
- Green house control
- Energy optimization
- Planning of agriculture and fisheries
- Water treatment plants
- Urban beach regeneration
- Integrated agriculture

Figure 18: Computer enhanced amoeba diagrams for past present and future sustainability for the workshop as a whole




Source: Bell, Correa Peña and Prem (2013)

c) Model and explore

The third stage in the implementation of "*Imagine*" addresses prospective analysis as such, using scenarios. Participants initially convene in focus groups to work out mini-scenarios for each key indicator. The various groups subsequently hold a brainstorming session to identify risks of incompatibility between the hypotheses per indicator and to eradicate or curb them by changing their course, thereby establishing a consistent overall scenario for the zone in question. This methodology was chosen in light of the Blue Plan's experience with prospective analysis exercises covering complex systems: group brainstorming is more effective when it focuses on an objective linked to a single key indicator; action required to reverse major trends emerges more clearly and is better understood. The important point during this stage is that action towards ensuring sustainability per key indicator should be compatible. Achieving overall consistency during the second stage requires the action plans for each key indicator to be analyzed, for which purpose a matrix of the various actions at global level can be drawn up and implemented. Potential inconsistencies are addressed in order to establish what measures should be taken and what provisions introduced in order to eliminate them, weighing up whether to take action by indicator or to combine.

4. Do and suggest

During the final stage, participants draw up a plan of action towards the more sustainable development of the territorial system based on the alternative scenario, the overall consistency of which has been checked in consideration of the compatibility matrix (Figure 8). They also establish a program for marketing and publicizing the results of the "*Imagine*" approach. In order to highlight priorities or rather the most "profitable" forms of action in terms of their impact or influence on the indicators, all actions with underlying evolution hypotheses for the alternative scenario are listed and clustered. A matrix is then used (with actions on the horizontal and key sustainability indicators on the vertical axis) in order to identify strong links between areas of action and indicators The purpose is to establish the potential impact of each area of action on each of the key indicators. Required actions can consequently be classed in order of priority, with a distinction being drawn between actions and measures: the former apply to specific operations requiring appropriate financing, whilst the latter are of a statutory, administrative or institutional nature and do not require specific financing. The final stage of "*Imagine*" consists of marketing and publicizing the results of the approach as well as drawing up a communication strategy to prompt decision makers to include the territorial system studied in a pro-active approach, channeling its development

towards sustainability, which would guarantee the genuine implementation of the action plan drawn up using the "*Imagine*" approach. This strategy needs consideration of the message to be transmitted, the targets it addresses, the means for publicizing it as well as the identification and appointment of the body or institution responsible for ensuring the implementation of the chosen action as well as the monitoring of the key indicators pertaining thereto.

Conclusion

Three essential points emerge from the experience with testing implementation of the approach on the ground in terms of the objective set for "*Imagine*" and bearing in mind the expected results, in other words engaging relevant stakeholders in joint reflection about a desirable future for their area in order to propose action and monitoring indicators:

- The effective involvement of several stakeholders from various sectors who convene, often for the first time, to address a territorial management issue;
- The relevance of the method and its stimulating effect, as well as the fact that it is perfectible, hence the scope for improving and enhancing knowledge;
- The results, in the form of an action plan ranked by priority and linked to sustainability indicators, which nonetheless raises the issue of actual implementation and monitoring.

The adaptability of "*Imagine*" and its flexibility in terms of its potential uses within a wide range of applications should also be underscored: the approach has proven eminently adjustable to any situation, its "toolbox" allowing it to respond in real time to various demands, such as paying closer attention to certain aspects such as the notion of sustainability threshold or, on the contrary, making rapid headway on certain better known aspects such as indicators. Far from being set in stone, the idea behind the "*Imagine*" approach is one of on-going improvement, with each workshop and each additional application driving progress and providing a further source of enhancement.
Intended for use within the framework of an ICZM project, it also lends itself to all types of local planning and development projects.
More information on the "*Imagine*" methodology can be found on the following address: https://planbleu.org/sites/default/files/upload/files/cahiers3_imagine_uk.pdf.

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# Appendices

## Appendice 1: the ICZM Protocol

Protocol on Integrated Coastal Zone Management in the Mediterranean

THE CONTRACTING PARTIES TO THE PRESENT PROTOCOL,

BEING PARTIES to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, adopted at Barcelona on 16 February 1976, and amended on 10 June 1995,

DESIROUS of implementing the obligations set out in Article 4(3)(e) and (5), of the said Convention,

CONSIDERING that the coastal zones of the Mediterranean Sea are the common natural and cultural heritage of the peoples of the Mediterranean and that they should be preserved and used judiciously for the benefit of present and future generations,

CONCERNED at the increase in anthropic pressure on the coastal zones of the Mediterranean Sea which is threatening their fragile nature and desirous of halting and reversing the process of coastal zone degradation and of significantly reducing the loss of biodiversity of coastal ecosystems,

WORRIED by the risks threatening coastal zones due to climate change, which is likely to result, inter alia, in a rise in sea level, and aware of the need to adopt sustainable measures to reduce the negative impact of natural phenomena,

CONVINCED that, as an irreplaceable ecological, economic and social resource, the planning and management of coastal zones with a view to their preservation and sustainable development requires a specific integrated approach at the level of the Mediterranean basin as a whole and of its coastal States, taking into account their diversity and in particular the specific needs of islands related to geomorphological characteristics,

TAKING INTO ACCOUNT the United Nations Convention on the Law of the Sea, done at Montego Bay on 10 December 1982, the Convention on Wetlands of International Importance especially as Waterfowl Habitat, done at Ramsar on 2 February 1971, and the Convention on Biological Diversity, done at Rio de Janeiro on 5 June 1992, to which many Mediterranean coastal States and the European Community are Parties,

CONCERNED in particular to act in cooperation for the development of appropriate and integrated plans for coastal zone management pursuant to Article 4(1)(e), of the United Nations Framework Convention on Climate Change, done at New York on 9 May 1992,

DRAWING on existing experience with integrated coastal zone management and the work of various organisations, including the European institutions,

BASED UPON the recommendations and work of the Mediterranean Commission on Sustainable Development and the recommendations of the Meetings of the Contracting Parties held in Tunis in 1997, Monaco in 2001, Catania in 2003, and Portoroz in 2005, and the Mediterranean Strategy for Sustainable Development adopted in Portoroz in 2005,

RESOLVED to strengthen at the Mediterranean level the efforts made by coastal States to ensure integrated coastal zone management,

DETERMINED to stimulate national, regional and local initiatives through coordinated promotional action, cooperation and partnership with the various actors concerned with a view to promoting efficient governance for the purpose of integrated coastal zone management,

DESIROUS of ensuring that coherence is achieved with regard to integrated coastal zone management in the application of the Convention and its Protocols,

HAVE AGREED AS FOLLOWS:

PART I

GENERAL PROVISIONS

Article 1

General obligations

In conformity with the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols, the Parties shall establish a common framework for the integrated management of the Mediterranean coastal zone and shall take the necessary measures to strengthen regional cooperation for this purpose.

Article 2

Definitions

For the purposes of this Protocol:

(a) "Parties" means the Contracting Parties to this Protocol;

(b) "Convention" means the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, done at Barcelona on 16 February 1976, as amended on 10 June 1995;

(c) "Organisation" means the body referred to in Article 17 of the Convention;

(d) "Centre" means the Priority Actions Programme Regional Activity Centre;

(e) "coastal zone" means the geomorphologic area either side of the seashore in which the interaction between the marine and land parts occurs in the form of complex ecological and resource systems made up of biotic and abiotic components coexisting and interacting with human communities and relevant socioeconomic activities;

(f) "integrated coastal zone management" means a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts.

Article 3

Geographical coverage

1. The area to which the Protocol applies shall be the Mediterranean Sea area as defined in Article 1 of the Convention. The area is also defined by:

(a) the seaward limit of the coastal zone, which shall be the external limit of the territorial sea of Parties; and

(b) the landward limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties.

2. If, within the limits of its sovereignty, a Party establishes limits different from those envisaged in paragraph 1 of this Article, it shall communicate a declaration to the Depositary at the time of the deposit of its instrument of ratification, acceptance, approval of, or accession to this Protocol, or at any other subsequent time, in so far as:

(a) the seaward limit is less than the external limit of the territorial sea;

(b) the landward limit is different, either more or less, from the limits of the territory of coastal units as defined above, in order to apply, inter alia, the ecosystem approach and economic and social criteria and to consider the specific needs of islands related to geomorphological characteristics and to take into account the negative effects of climate change.

3. Each Party shall adopt or promote at the appropriate institutional level adequate actions to inform populations and any relevant actor of the geographical coverage of the present Protocol.

Article 4

Preservation of rights

1. Nothing in this Protocol nor any act adopted on the basis of this Protocol shall prejudice the rights, the present and future claims or legal views of any Party relating to the Law of the Sea, in particular the nature and the extent of marine areas, the delimitation of marine areas between States with opposite or adjacent coasts, the right and modalities of passage through straits used for international navigation and the right of innocent passage in territorial seas, as well as the nature and extent of the jurisdiction of the coastal State, the flag State or the port State.

2. No act or activity undertaken on the basis of this Protocol shall constitute grounds for claiming, contending or disputing any claim to national sovereignty or jurisdiction.

3. The provisions of this Protocol shall be without prejudice to stricter provisions respecting the protection and management of the coastal zone contained in other existing or future national or international instruments or programmes.

4. Nothing in this Protocol shall prejudice national security and defence activities and facilities; however, each Party agrees that such activities and facilities should be operated or established, so far as is reasonable and practicable, in a manner consistent with this Protocol.

Article 5

Objectives of integrated coastal zone management

The objectives of integrated coastal zone management are to:

(a) facilitate, through the rational planning of activities, the sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development;

(b) preserve coastal zones for the benefit of current and future generations;

(c) ensure the sustainable use of natural resources, particularly with regard to water use;

(d) ensure preservation of the integrity of coastal ecosystems, landscapes and geomorphology;

(e) prevent and/or reduce the effects of natural hazards and in particular of climate change, which can be induced by natural or human activities;

(f) achieve coherence between public and private initiatives and between all decisions by the public authorities, at the national, regional and local levels, which affect the use of the coastal zone.

Article 6

General principles of integrated coastal zone management

In implementing this Protocol, the Parties shall be guided by the following principles of integrated coastal zone management:

(a) the biological wealth and the natural dynamics and functioning of the intertidal area and the complementary and interdependent nature of the marine part and the land part forming a single entity shall be taken particularly into account;

(b) all elements relating to hydrological, geomorphological, climatic, ecological, socioeconomic and cultural systems shall be taken into account in an integrated manner, so as not to exceed the carrying capacity of the coastal zone and to prevent the negative effects of natural disasters and of development;

(c) the ecosystems approach to coastal planning and management shall be applied so as to ensure the sustainable development of coastal zones;

(d) appropriate governance allowing adequate and timely participation in a transparent decision-making process by local populations and stakeholders in civil society concerned with coastal zones shall be ensured;

(e) cross-sectorally organised institutional coordination of the various administrative services and regional and local authorities competent in coastal zones shall be required;

(f) the formulation of land use strategies, plans and programmes covering urban development and socioeconomic activities, as well as other relevant sectoral policies, shall be required;

(g) the multiplicity and diversity of activities in coastal zones shall be taken into account, and priority shall be given, where necessary, to public services and activities requiring, in terms of use and location, the immediate proximity of the sea;

(h) the allocation of uses throughout the entire coastal zone should be balanced, and unnecessary concentration and urban sprawl should be avoided;

(i) preliminary assessments shall be made of the risks associated with the various human activities and infrastructure so as to prevent and reduce their negative impact on coastal zones;

(j) damage to the coastal environment shall be prevented and, where it occurs, appropriate restoration shall be effected.

Article 7

Coordination

1. For the purposes of integrated coastal zone management, the Parties shall:

(a) ensure institutional coordination, where necessary through appropriate bodies or mechanisms, in order to avoid sectoral approaches and facilitate comprehensive approaches;

(b) organise appropriate coordination between the various authorities competent for both the marine and the land parts of coastal zones in the different administrative services, at the national, regional and local levels;

(c) organise close coordination between national authorities and regional and local bodies in the field of coastal strategies, plans and programmes and in relation to the various authorisations for activities that may be achieved through joint consultative bodies or joint decision-making procedures.

2. Competent national, regional and local coastal zone authorities shall, insofar as practicable, work together to strengthen the coherence and effectiveness of the coastal strategies, plans and programmes established.

PART II

ELEMENTS OF INTEGRATED COASTAL ZONE MANAGEMENT

Article 8

Protection and sustainable use of the coastal zone

1. In conformity with the objectives and principles set out in Articles 5 and 6 of this Protocol, the Parties shall endeavour to ensure the sustainable use and management of coastal zones in order to preserve the coastal natural habitats, landscapes, natural resources and ecosystems, in compliance with international and regional legal instruments.

2. For this purpose, the Parties:

(a) shall establish in coastal zones, as from the highest winter waterline, a zone where construction is not allowed. Taking into account, inter alia, the areas directly and negatively affected by climate change and natural risks, this zone may not be less than 100 meters in width, subject to the provisions of subparagraph (b) below. Stricter national measures determining this width shall continue to apply;

(b) may adapt, in a manner consistent with the objectives and principles of this Protocol, the provisions mentioned above:

1. for projects of public interest,

2. in areas having particular geographical or other local constraints, especially related to population density or social needs, where individual housing, urbanisation or development are provided for by national legal instruments;

(c) shall notify to the Organisation their national legal instruments providing for the above adaptations.

3. The Parties shall also endeavour to ensure that their national legal instruments include criteria for sustainable use of the coastal zone. Such criteria, taking into account specific local conditions, shall include, inter alia, the following:

(a) identifying and delimiting, outside protected areas, open areas in which urban development and other activities are restricted or, where necessary, prohibited;

(b) limiting the linear extension of urban development and the creation of new transport infrastructure along the coast;

(c) ensuring that environmental concerns are integrated into the rules for the management and use of the public maritime domain;

(d) providing for freedom of access by the public to the sea and along the shore;

(e) restricting or, where necessary, prohibiting the movement and parking of land vehicles, as well as the movement and anchoring of marine vessels, in fragile natural areas on land or at sea, including beaches and dunes.

Article 9

Economic activities

1. In conformity with the objectives and principles set forth in Articles 5 and 6 of this Protocol, and taking into account the relevant provisions of the Barcelona Convention and its Protocols, the Parties shall:

(a) accord specific attention to economic activities that require immediate proximity to the sea;

(b) ensure that the various economic activities minimise the use of natural resources and take into account the needs of future generations;

(c) ensure respect for integrated water resources management and environmentally sound waste management;

(d) ensure that the coastal and maritime economy is adapted to the fragile nature of coastal zones and that resources of the sea are protected from pollution;

(e) define indicators of the development of economic activities to ensure sustainable use of coastal zones and reduce pressures that exceed their carrying capacity;

(f) promote codes of good practice among public authorities, economic actors and non-governmental organisations.

2. In addition, with regard to the following economic activities, the Parties agree:

(a) Agriculture and industry

to guarantee a high level of protection of the environment in the location and operation of agricultural and industrial activities so as to preserve coastal ecosystems and landscapes and prevent pollution of the sea, water, air and soil;

(b) Fishing

(i) to take into account the need to protect fishing areas in development projects;

(ii) to ensure that fishing practices are compatible with sustainable use of natural marine resources;

(c) Aquaculture

(i) to take into account the need to protect aquaculture and shellfish areas in development projects;

(ii) to regulate aquaculture by controlling the use of inputs and waste treatment;

(d) Tourism, sporting and recreational activities

(i) to encourage sustainable coastal tourism that preserves coastal ecosystems, natural resources, cultural heritage and landscapes;

(ii) to promote specific forms of coastal tourism, including cultural, rural and ecotourism, while respecting the traditions of local populations;

(iii) to regulate or, where necessary, prohibit the practice of various sporting and recreational activities, including recreational fishing and shellfish extraction;

(e) Utilisation of specific natural resources

(i) to subject to prior authorisation the excavation and extraction of minerals, including the use of seawater in desalination plants and stone exploitation;

(ii) to regulate the extraction of sand, including on the seabed and river sediments or prohibit it where it is likely to adversely affect the equilibrium of coastal ecosystems;

(iii) to monitor coastal aquifers and dynamic areas of contact or interface between fresh and salt water, which may be adversely affected by the extraction of underground water or by discharges into the natural environment;

(f) Infrastructure, energy facilities, ports and maritime works and structures

to subject such infrastructure, facilities, works and structures to authorisation so that their negative impact on coastal ecosystems, landscapes and geomorphology is minimised or, where appropriate, compensated by non-financial measures;

(g) Maritime activities

to conduct maritime activities in such a manner as to ensure the preservation of coastal ecosystems in conformity with the rules, standards and procedures of the relevant international conventions.

Article 10

Specific coastal ecosystems

The Parties shall take measures to protect the characteristics of certain specific coastal ecosystems, as follows:

1. Wetlands and estuaries

In addition to the creation of protected areas and with a view to preventing the disappearance of wetlands and estuaries, the Parties shall:

(a) take into account in national coastal strategies and coastal plans and programmes and when issuing authorisations, the environmental, economic and social function of wetlands and estuaries;

(b) take the necessary measures to regulate or, if necessary, prohibit activities that may have adverse effects on wetlands and estuaries;

(c) undertake, to the extent possible, the restoration of degraded coastal wetlands with a view to reactivating their positive role in coastal environmental processes.

2. Marine habitats

The Parties, recognising the need to protect marine areas hosting habitats and species of high conservation value, irrespective of their classification as protected areas, shall:

(a) adopt measures to ensure the protection and conservation, through legislation, planning and management of marine and coastal areas, in particular of those hosting habitats and species of high conservation value;

(b) undertake to promote regional and international cooperation for the implementation of common programmes on the protection of marine habitats.

3. Coastal forests and woods

The Parties shall adopt measures intended to preserve or develop coastal forests and woods located, in particular, outside specially protected areas.

4. Dunes

The Parties undertake to preserve and, where possible, rehabilitate in a sustainable manner dunes and bars.

Article 11

Coastal landscapes

1. The Parties, recognising the specific aesthetic, natural and cultural value of coastal landscapes, irrespective of their classification as protected areas, shall adopt measures to ensure the protection of coastal landscapes through legislation, planning and management.

2. The Parties undertake to promote regional and international cooperation in the field of landscape protection, and in particular, the implementation, where appropriate, of joint actions for transboundary coastal landscapes.

Article 12

Islands

The Parties undertake to accord special protection to islands, including small islands, and for this purpose to:

(a) promote environmentally friendly activities in such areas and take special measures to ensure the participation of the inhabitants in the protection of coastal ecosystems based on their local customs and knowledge;

(b) take into account the specific characteristics of the island environment and the necessity to ensure interaction among islands in national coastal strategies, plans and programmes and management instruments, particularly in the fields of transport, tourism, fishing, waste and water.

Article 13

Cultural heritage

1. The Parties shall adopt, individually or collectively, all appropriate measures to preserve and protect the cultural, in particular archaeological and historical, heritage of coastal zones, including the underwater cultural heritage, in conformity with the applicable national and international instruments.

2. The Parties shall ensure that the preservation in situ of the cultural heritage of coastal zones is considered as the first option before any intervention directed at this heritage.

3. The Parties shall ensure in particular that elements of the underwater cultural heritage of coastal zones removed from the marine environment are conserved and managed in a manner safeguarding their long-term preservation and are not traded, sold, bought or bartered as commercial goods.

Article 14

Participation

1. With a view to ensuring efficient governance throughout the process of the integrated management of coastal zones, the Parties shall take the necessary measures to ensure the appropriate involvement in the phases of the formulation and implementation of coastal and marine strategies, plans and programmes or projects, as well as the issuing of the various authorisations, of the various stakeholders, including:

- the territorial communities and public entities concerned,

- economic operators,

- non-governmental organisations,

- social actors,

- the public concerned.

Such participation shall involve, inter alia, consultative bodies, inquiries or public hearings, and may extend to partnerships.

2. With a view to ensuring such participation, the Parties shall provide information in an adequate, timely and effective manner.

3. Mediation or conciliation procedures and a right of administrative or legal recourse should be available to any stakeholder challenging decisions, acts or omissions, subject to the participation provisions established by the Parties with respect to plans, programmes or projects concerning the coastal zone.

Article 15

Awareness-raising, training, education and research

1. The Parties undertake to carry out, at the national, regional or local level, awareness-raising activities on integrated coastal zone management and to develop educational programmes, training and public education on this subject.

2. The Parties shall organise, directly, multilaterally or bilaterally, or with the assistance of the Organisation, the Centre or the international organisations concerned, educational programmes, training and public education on integrated management of coastal zones with a view to ensuring their sustainable development.

3. The Parties shall provide for interdisciplinary scientific research on integrated coastal zone management and on the interaction between activities and their impacts on coastal zones. To this end, they should establish or support specialised research centres. The purpose of this research is, in particular, to further knowledge of integrated coastal zone management, to contribute to public information and to facilitate public and private decision-making.

PART III

INSTRUMENTS FOR INTEGRATED COASTAL ZONE MANAGEMENT

Article 16

Monitoring and observation mechanisms and networks

1. The Parties shall use and strengthen existing appropriate mechanisms for monitoring and observation, or create new ones if necessary. They shall also prepare and regularly update national inventories of coastal zones which should cover, to the extent possible, information on resources and activities, as well as on institutions, legislation and planning that may influence coastal zones.

2. In order to promote exchange of scientific experience, data and good practices, the Parties shall participate, at the appropriate administrative and scientific level, in a Mediterranean coastal zone network, in cooperation with the Organisation.

3. With a view to facilitating the regular observation of the state and evolution of coastal zones, the Parties shall set out an agreed reference format and process to collect appropriate data in national inventories.

4. The Parties shall take all necessary means to ensure public access to the information derived from monitoring and observation mechanisms and networks.

Article 17

Mediterranean strategy for integrated coastal zone management

The Parties undertake to cooperate for the promotion of sustainable development and integrated management of coastal zones, taking into account the Mediterranean Strategy for Sustainable Development and complementing it where necessary. To this end, the Parties shall define, with the assistance of the Centre, a common regional framework for integrated coastal zone management in the Mediterranean to be implemented by means of appropriate regional action plans and other operational instruments, as well as through their national strategies.

Article 18

National coastal strategies, plans and programmes

1. Each Party shall further strengthen or formulate a national strategy for integrated coastal zone management and coastal implementation plans and programmes consistent with the common regional framework and in conformity with the integrated management objectives and principles of this Protocol and shall inform the Organisation about the coordination mechanism in place for this strategy.

2. The national strategy, based on an analysis of the existing situation, shall set objectives, determine priorities with an indication of the reasons, identify coastal ecosystems needing management, as well as all relevant actors and processes, enumerate the measures to be taken and their cost as well as the institutional instruments and legal and financial means available, and set an implementation schedule.

3. Coastal plans and programmes, which may be self-standing or integrated in other plans and programmes, shall specify the orientations of the national strategy and implement it at an appropriate territorial level, determining, inter alia, and where appropriate, the carrying capacities and conditions for the allocation and use of the respective marine and land parts of coastal zones.

4. The Parties shall define appropriate indicators in order to evaluate the effectiveness of integrated coastal zone management strategies, plans and programmes, as well as the progress of implementation of the Protocol.

Article 19

Environmental assessment

1. Taking into account the fragility of coastal zones, the Parties shall ensure that the process and related studies of environmental impact assessment for public and private projects likely to have significant environmental effects on the coastal zones, and in particular on their ecosystems, take into consideration the specific sensitivity of the environment and the inter-relationships between the marine and terrestrial parts of the coastal zone.

2. In accordance with the same criteria, the Parties shall formulate, as appropriate, a strategic environmental assessment of plans and programmes affecting the coastal zone.

3. The environmental assessments should take into consideration the cumulative impacts on the coastal zones, paying due attention, inter alia, to their carrying capacities.

Article 20

Land policy

1. For the purpose of promoting integrated coastal zone management, reducing economic pressures, maintaining open areas and allowing public access to the sea and along the shore, Parties shall adopt appropriate land policy instruments and measures, including the process of planning.

2. To this end, and in order to ensure the sustainable management of public and private land of the coastal zones, Parties may, inter alia, adopt mechanisms for the acquisition, cession, donation or transfer of land to the public domain and institute easements on properties.

Article 21

Economic, financial and fiscal instruments

For the implementation of national coastal strategies and coastal plans and programmes, Parties may take appropriate measures to adopt relevant economic, financial and/or fiscal instruments intended to support local, regional and national initiatives for the integrated management of coastal zones.

PART IV

RISKS AFFECTING THE COASTAL ZONE

Article 22

Natural hazards

Within the framework of national strategies for integrated coastal zone management, the Parties shall develop policies for the prevention of natural hazards. To this end, they shall undertake vulnerability and hazard assessments of coastal zones and take prevention, mitigation and adaptation measures to address the effects of natural disasters, in particular of climate change.

Article 23

Coastal erosion

1. In conformity with the objectives and principles set out in Articles 5 and 6 of this Protocol, the Parties, with a view to preventing and mitigating the negative impact of coastal erosion more effectively, undertake to adopt the necessary measures to maintain or restore the natural capacity of the coast to adapt to changes, including those caused by the rise in sea levels.

2. The Parties, when considering new activities and works located in the coastal zone including marine structures and coastal defence works, shall take particular account of their negative effects on coastal erosion and the direct and indirect costs that may result. In respect of existing activities and structures, the Parties should adopt measures to minimise their effects on coastal erosion.

3. The Parties shall endeavour to anticipate the impacts of coastal erosion through the integrated management of activities, including adoption of special measures for coastal sediments and coastal works.

4. The Parties undertake to share scientific data that may improve knowledge on the state, development and impacts of coastal erosion.

Article 24

Response to natural disasters

1. The Parties undertake to promote international cooperation to respond to natural disasters, and to take all necessary measures to address in a timely manner their effects.

2. The Parties undertake to coordinate use of the equipment for detection, warning and communication at their disposal, making use of existing mechanisms and initiatives, to ensure the transmission as rapidly as possible of urgent information concerning major natural disasters. The Parties shall notify the Organisation which national authorities are competent to issue and receive such information in the context of relevant international mechanisms.

3. The Parties undertake to promote mutual cooperation and cooperation among national, regional and local authorities, non-governmental organisations and other competent organisations for the provision on an urgent basis of humanitarian assistance in response to natural disasters affecting the coastal zones of the Mediterranean Sea.

PART V

INTERNATIONAL COOPERATION

Article 25

Training and research

1. The Parties undertake, directly or with the assistance of the Organisation or the competent international organisations, to cooperate in the training of scientific, technical and administrative personnel in the field of integrated coastal zone management, particularly with a view to:

(a) identifying and strengthening capacities;

(b) developing scientific and technical research;

(c) promoting centres specialised in integrated coastal zone management;

(d) promoting training programmes for local professionals.

2. The Parties undertake, directly or with the assistance of the Organisation or the competent international organisations, to promote scientific and technical research into integrated coastal zone management, particularly through the exchange of scientific and technical information and the coordination of their research programmes on themes of common interest.

Article 26

Scientific and technical assistance

For the purposes of integrated coastal zone management, the Parties undertake, directly or with the assistance of the Organisation or the competent international organisations to cooperate for the provision of scientific and technical assistance, including access to environmentally sound technologies and their transfer, and other possible forms of assistance, to Parties requiring such assistance.

Article 27

Exchange of information and activities of common interest

1. The Parties undertake, directly or with the assistance of the Organisation or the competent international organisations, to cooperate in the exchange of information on the use of the best environmental practices.

2. With the support of the Organisation, the Parties shall in particular:

(a) define coastal management indicators, taking into account existing ones, and cooperate in the use of such indicators;

(b) establish and maintain up-to-date assessments of the use and management of coastal zones;

(c) carry out activities of common interest, such as demonstration projects of integrated coastal zone management.

Article 28

Transboundary cooperation

The Parties shall endeavour, directly or with the assistance of the Organisation or the competent international organisations, bilaterally or multilaterally, to coordinate, where appropriate, their national coastal strategies, plans and programmes related to contiguous coastal zones. Relevant domestic administrative bodies shall be associated with such coordination.

Article 29

Transboundary environmental assessment

1. Within the framework of this Protocol, the Parties shall, before authorising or approving plans, programmes and projects that are likely to have a significant adverse effect on the coastal zones of other Parties, cooperate by means of notification, exchange of information and consultation in assessing the environmental impacts of such plans, programmes and projects, taking into account Article 19 of this Protocol and Article 4(3)(d) of the Convention.

2. To this end, the Parties undertake to cooperate in the formulation and adoption of appropriate guidelines for the determination of procedures for notification, exchange of information and consultation at all stages of the process.

3. The Parties may, where appropriate, enter into bilateral or multilateral agreements for the effective implementation of this Article.

PART VI

INSTITUTIONAL PROVISIONS

Article 30

Focal Points

Each Party shall designate a Focal Point to serve as liaison with the Centre on the technical and scientific aspects of the implementation of this Protocol and to disseminate information at the national, regional and local level. The Focal Points shall meet periodically to carry out the functions deriving from this Protocol.

Article 31

Reports

The Parties shall submit to the ordinary meetings of the Contracting Parties, reports on the implementation of this Protocol, in such form and at such intervals as these Meetings may determine, including the measures taken, their effectiveness and the problems encountered in their implementation.

Article 32

Institutional coordination

1. The Organisation shall be responsible for coordinating the implementation of this Protocol. For this purpose, it shall receive the support of the Centre, to which it may entrust the following functions:

(a) to assist the Parties to define a common regional framework for integrated coastal zone management in the Mediterranean pursuant to Article 17;

(b) to prepare a regular report on the state and development of integrated coastal zone management in the Mediterranean Sea with a view to facilitating implementation of the Protocol;

(c) to exchange information and carry out activities of common interest pursuant to Article 27;

(d) upon request, to assist the Parties:

- to participate in a Mediterranean coastal zone network pursuant to Article 16,

- to prepare and implement their national strategies for integrated coastal zone management pursuant to Article 18,

- to cooperate in training activities and in scientific and technical research programmes pursuant to Article 25,

- to coordinate, when appropriate, the management of transboundary coastal zones pursuant to Article 28;

(e) to organise the meetings of the Focal Points pursuant to Article 30;

(f) to carry out any other function assigned to it by the Parties.

2. For the purposes of implementing this Protocol, the Parties, the Organisation and the Centre may jointly establish cooperation with non-governmental organisations the activities of which are related to the Protocol.

Article 33

Meetings of the Parties

1. The ordinary meetings of the Parties to this Protocol shall be held in conjunction with the ordinary meetings of the Contracting Parties to the Convention held pursuant to Article 18 of the Convention. The Parties may also hold extraordinary meetings in conformity with that Article.

2. The functions of the meetings of the Parties to this Protocol shall be:

(a) to keep under review the implementation of this Protocol;

(b) to ensure that this Protocol is implemented in coordination and synergy with the other Protocols;

(c) to oversee the work of the Organisation and of the Centre relating to the implementation of this Protocol and providing policy guidance for their activities;

(d) to consider the efficiency of the measures adopted for integrated coastal zone management and the need for other measures, in particular in the form of annexes or amendments to this Protocol;

(e) to make recommendations to the Parties on the measures to be adopted for the implementation of this Protocol;

(f) to examine the proposals made by the meetings of Focal Points pursuant to Article 30 of this Protocol;

(g) to consider reports transmitted by the Parties and making appropriate recommendations pursuant to Article 26 of the Convention;

(h) to examine any other relevant information submitted through the Centre;

(i) to examine any other matter relevant to this Protocol, as appropriate.

PART VII

FINAL PROVISIONS

Article 34

Relationship with the Convention

1. The provisions of the Convention relating to any Protocol shall apply with respect to this Protocol.

2. The rules of procedure and the financial rules adopted pursuant to Article 24 of the Convention shall apply with respect to this Protocol, unless the Parties to this Protocol agree otherwise.

Article 35

Relations with third parties

1. The Parties shall invite, where appropriate, States that are not Parties to this Protocol and international organisations to cooperate in the implementation of this Protocol.

2. The Parties undertake to adopt appropriate measures, consistent with international law, to ensure that no one engages in any activity contrary to the principles and objectives of this Protocol.

Article 36

Signature

This Protocol shall be open for signature at Madrid, Spain, from 21 January 2008 to 20 January 2009 by any Contracting Party to the Convention.

Article 37

Ratification, acceptance or approval

This Protocol shall be subject to ratification, acceptance or approval. Instruments of ratification, acceptance or approval shall be deposited with the Government of Spain, which will assume the functions of Depositary.

Article 38

Accession

As from 21 January 2009 this Protocol shall be open for accession by any Party to the Convention.

Article 39

Entry into force

This Protocol shall enter into force on the 30th day following the deposit of at least six instruments of ratification, acceptance, approval or accession.

Article 40

Authentic texts

The original of this Protocol, of which the Arabic, English, French and Spanish texts are equally authentic, shall be deposited with the Depositary.

## *Appendix 2: Table A1: Customized table for the pilot area of Comacchio, Italy*

| Sets of indicators | | Priority | Measurement | Specify proxy or qualitative indicator | Spatial level | Source of data | Final Measurement | Do you consider this value (final measurement) satisfactory for your PA? | According to your knowledge, what has been the trend of the indicator in the last 10 years (decreasing, stable or increasing)? | If available and only for quantitative data, please specify trend value as ±% |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Core indicators** | | | | | | | | | |
| **C.B3.1.** | Direct tourism employment as % of total employment in the destination | High | Quantitative Data | | NUTS3 unit | Economic report | 15 | | Decreasing | |
| **C.C1.1.** | Number of tourists/visitors per 100 residents | High | Quantitative Data | | NUTS3 unit | Economic report | 10 | | Increasing | |
| **Destination Indicators: Dv.Nature/Ecotourism** | | | | | | | | | | |
| **Dv.A3.** | Total number of visitors to parks and to key sites | High | Quantitative Data | | Destination/PA level | Parco Delta Po report | n/a | | Increasing | |
| **Dv.B1.** | Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined systems/assets in protected area) | High | Qualitative Data | | Destination/PA level | Parco Delta Po report | n/a | | Increasing | |
| **Dv.C1.** | % of site area occupied by rare or unique species | High | Quantitative Data | | Destination/PA level | Parco Delta Po report | n/a | | | |
| **Dv.C2.** | % of endemic species at the site | High | Quantitative Data | | Destination/PA level | Parco Delta Po report | 10 | | Decreasing | |
| **Dv.D1.** | Existence of up to date tourism plans and | High | Quantitative | | Destination/PA | Parco Delta | yes | | | |

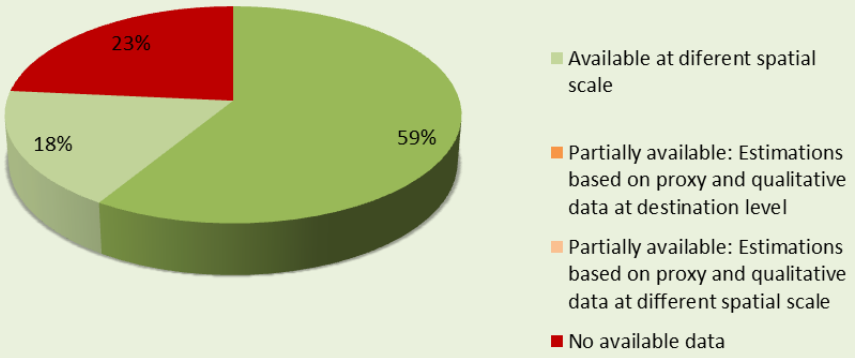
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | policies(YES/NO) | | Data | | level | Po report | | | | |
| **Dv.D2.** | Existence of environmental plan and management(YES/NO) | High | Quantitative Data | | Destination/PA level | Parco Delta Po report | yes | | | |
| **Dv.D10.** | Existence of performance indicators designated for evaluating the plan developed and used(YES/NO) à P.I. | High | Quantitative Data | | Destination/PA level | Parco Delta Po report | yes | | | |
| **Dv.D13.** | Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO) | High | Quantitative Data | | Destination/PA level | Parco Delta Po report | no | | | |
| **Pilot area-specific indicators** | | | | | | | | | | |
| **P.A1.2.** | % shoreline subjected to erosion | High | Quantitative Data | | Destination/PA level | Regional DB | 27 km | | Increasing | |
| **P.A1.3.** | Coastal area in degraded condition (low/medium/high) | High | Quantitative Data | | Destination/PA level | Regional DB | Southern Lido di Spina: high, Northern Lido di Spina: low | | Increasing | |
| **P.A1.6.** | Coastal flooding events per year(number) | High | Quantitative Data | | Destination/PA level | Regional DB | 0 | | | |
| **P.A2.1.** | Land occupied by artificial surfaces within the first 500m of coast (in %) | Low | Quantitative Data | | Destination/PA level | | | | | |
| **P.A2.2.** | % of area designated for tourism purposes | Low | Quantitative Data | | Destination/PA level | | | | | |
| **P.A3.1.** | Total tourist numbers (mean, monthly, peak) (categorized by their type of activity) | High | Quantitative Data | | NUTS3 unit | Economic report | 3250000 | | | |
| **P.A3.3.** | Water use (total volume in liters or $m^3$ consumed and liters per tourist per day) | Low | Quantitative Data | | Destination/PA level | | | | | |
| **P.A4.2.** | Rate of loss of protected areas | High | Qualitative Data | | Destination/PA level | | | | Decreasing | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **P.B1.2.** | Length of protected and defended coastline (km) | High | Quantitative Data | | Destination/PA level | Regional DB | 9,5 km | | Stable | |
| **P.B4.8.** | Volume ($m^3$) of sediments dredged per year | High | Quantitative Data | | Destination/PA level | Regional DB | 100000 m3 | | Stable | |

Source : University of Thessaly for Co-Evolve

## *Appendix 3: Table A2: Customized sustainability indicators toolkit and sustainability analysis for the Pilot Area of Comacchio*

| | |
|---|---|
| **Pilot Area** | 2B. Comacchio |
| **Partner** | Emilia-Romagna Region |
| **RESULTS** | |
| **Synopsis** | The results show declining environmental conditions in terms of biodiversity and habitat loss which are highly correlated to the development of ecotourism activities. The area needs to make important efforts in order to reach sustainable development levels and define the boundaries/thresholds on which to build future plans and policies. |
| **Customized Tourism Sustainability Toolkit** | **Core indicators**<br>**C.B3.1.** Direct tourism employment as % of total employment in the destination<br>**C.C1.1.** Number of tourists/visitors per 100 reidents<br>**Destination Indicators: Dv.Nature/Ecotourism**<br>**Dv.A3.** Total number of visitors to parks and to key sites<br>**Dv.B1.** Number of sites/ecosystems/assets considered to be damaged or threatened (% of all defined systems/assets in protected area)<br>**Dv.B5.** N° of visitors acceptable, according to the capacity of the equipment and facilities of the site (depends on capacity studies establishing limits)<br>**Dv.C1.** % of site area occupied by rare or unique species<br>**Dv.C2.** % of endemic species at the site<br>**Dv.D1.** Existence of up to date tourism plans and policies(YES/NO)<br>**Dv.D2.** Existence of environmental plan and management(YES/NO)<br>**Dv.D10.** Existence of performance indicators designated for evaluating the plan developed and used(YES/NO)<br>**Dv.D13.** Existence and functioning of a representative coordinating mechanism for MSP/ICZM (YES/NO)<br>**Pilot area-specific indicators**<br>**P.A1.2.** % shoreline subjected to erosion<br>**P.A1.3.** Coastal area in degraded condition (low/medium/high)<br>**P.A1.6.** Coastal flooding events per year(number)<br>**P.A2.1.** Land occupied by artificial surfaces within the first 500m of coast (in %)<br>**P.A2.2.** % of area designated for tourism purposes<br>**P.A3.1.** Total tourist numbers (mean, monthly, peak) (categorized by their type of activity)<br>**P.A3.3.** Water use (total volume in liters or $m^3$ consumed and liters per tourist per day)<br>**P.A4.2.** Rate of loss of protected areas<br>**P.B1.2.** Length of protected and defended coastline (km)<br>**P.B4.8.** Volume ($m^3$) of sediments dredged per year |

| | |
|---|---|
| | **P.C3.1.** Level of tourism sector involvement in public policy (advisory bodies, review panels etc) |
| **Data Availability Overview** |  |
| **Key message from final measurement and data evaluation** | Spatial inconsistencies are clearly limited in the case of Comacchio. However, the availability of data related to tourism flows at NUTS3 level and the complete lack of data related to the main tourism activity of the area (nature/ecotourism) do not allow for an accurate assessment of the dynamics of tourism development at this stage. More specifically, there seems to be ***important gaps in measuring*** socio-economic aspects and key assets for tourism development at the destination.<br>There is also significant information regarding the trends of highly prioritized indicators over the past years whereas thresholds based on satisfaction levels could not be defined at this stage.<br>Tourism plans and policies seem to focus mainly on the development of nature and ecotourism, which can be attributed to the protected dune area within Comacchio municipality (Po Delta Park). However, given the increasing trends in damaged/threatened ecosystems, degraded coastal areas, erosion levels as well as the decreasing presence of endemic species at the site, the pilot area needs to overcome important barriers in order to reach sustainable development levels. |
| **Suggestions for future evaluation and monitoring** | Special attention should be given in ***recording and monitoring the key assets for the development of ecotourism in the area (threatened sites, endangered and endemic species), socio-economic indicators related to tourism flows and spatial concentration as well as monitoring the actual implementation of tourism and environmental plans and policies.*** |

Source: University of Thessaly for Co-Evolve