MEDITERRANEAN MARINE SPATIAL PLANNING (MSP)

A practical guide to support the virtual workspace and planning tools for MSP

Using the seven stage MSP process and including:

✓ Climate Actions
✓ Ecosystem Approach
✓ Land-Sea Interactions

Coordinated and published by
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INTRODUCTION

The MSP ICZM virtual workspace for Mediterranean Marine Spatial Planning (MSP) gives planners and policy makers’ quick access to the latest MSP information and planning tools.

Go to https://msp.iczmplatform.org/

What is MSP?

Marine spatial planning (MSP) is key to better protection of marine ecosystems - by strategically allocating the use of marine areas, and working together to reduce conflict and improve planning at every level of governance.

Responsibility for effective planning cuts across the highest-levels of government to sub-national and local authorities. Many economic sectors, citizens and scientists have an important role to play in setting a clear course for sustainable marine activity and exploitation.

Uniquely amongst the World’s Regional Seas, a protocol to the Barcelona Convention - the Protocol on Integrated Coastal Zone Management in the Mediterranean (ICZM Protocol) adopted in 2008 - enables the planning of the Mediterranean marine areas within the broader scope of coastal planning and management mandating regional, international and transboundary cooperation. This gives the coastal and marine planning in the Mediterranean its very distinctive character.

Policy and Legal Framework

Spatial planning of the coastal zone is considered an essential instrument for the implementation of the Protocol on ICZM in the Mediterranean. The ICZM Protocol is a unique legal instrument extending geographic coverage to both the land and sea areas of the coast:

According to Article 3, the area to which the Protocol applies (i.e., the coastal zones) is the area between:

1. The seaward limit of the coastal zone, which shall be the external limit of the territorial sea of Parties; and
2. The landward limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties.

Spatial planning to the seaward limit of the coastal zone i.e. MSP, is therefore an integral component of measures 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” (Article 5).

The Conceptual Framework for Marine Spatial Planning in the Mediterranean introduces MSP in the framework of the Barcelona Convention, and in particular:

1. Links MSP to ICZM - considering MSP as the main tool or 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 ecosystem approach goals.
2. Provides a common context to Contracting Parties (CPs) for the implementation of MSP in the Mediterranean Region.
Use the planning tools in the MSP virtual workspace to help you design and assess the progress of your own plan taking an ecosystem approach, reviewing land-sea interactions and tackling climate change.

Discover all planning tools.

Mediterranean MSP Planning and Progress Checklist

The Planning and Progress Checklist tool takes you through the MSP preparation process giving you specific actions to adapt to your local context, and set milestones. By using a simple traffic light system the checklist can also be used as a rapid self-assessment tool; allowing you to measure your own progress, and identify gaps and priorities.

Ecosystem Approach and MSP Planning Tool

The Ecosystem Approach & MSP Planning Tool is built to enable a short self-assessment of your implementation activity, to get a to-do list of specific tasks and to identify the barriers you’ve faced when introducing ecosystem approach in your MSP.

Climate Action and MSP Planning Tool

The Climate Action & MSP Planning Tool is built to support climate change action within your planning. We’ve included examples for different sectors to inspire you to take specific action using local knowledge and actors in your region.

Land-Sea Interactions and MSP Planning Tool

The Land-Sea Interactions & MSP Planning Tool is excel-based tool to support LSI analysis. The tool has been created based on the LSI methodological guidelines developed by PAP/RAC.
The seven stages of the MSP Process offer a practical guide to preparing and delivering a marine spatial plan, incorporating climate actions, ecosystem approach and land-sea interactions. The seven interrelated stages each offers useful tips and a list of specific planning tasks to help you successfully deliver your marine spatial plan. The stages have been created based on the Conceptual Framework for MSP.

On the virtual workspace you’ll find the Rapid Self-Assessment and Programming Tool to help you plan the preparation and delivery of your plan, to measure your own progress, to identify gaps and to select your priorities.

The Conceptual Framework sets out a seven stage MSP process. These are the stages we have used in the MSP Process.
Step 1. Prepare: Starting the Process and Getting Organised

A solid foundation for your planning process is vital - take the time you need to get off to a flying start.

Build relationships with partners from within and beyond your organisation, with stakeholders and individuals who can help and support the plan making process. No plan will succeed without the right people in place.

Never underestimate the technical and human challenges involved in developing a marine spatial plan (MSP); whether that includes the special technology and skills required for information technology in the marine space, the unfamiliar marine “languages” of those involved, and the special challenges of gathering data, information and knowledge. Marine users often form very close communities with long established and informal governance structures - all of them need to be fully involved. Respect their traditional territories and responsibilities. Remember groups in the community that have been traditionally excluded from decision-making in the marine environment, for example the disabled, the poor and, in many cases, women and create pathways to bring them into the process.

Communication skills are as important as technical ones - enabling partners and stakeholders to clearly visualise problems, potential futures, solutions, and to facilitate their inclusion. Communications should not be over-technical and be easy to access and understand. Keep it simple.

Step 2. Agree the Destination: Assessing the Context and Defining a Vision

Use wide discussions from across society to refine the themes that the plan will focus on. Clearly articulate the strategic vision for the future of the marine area using the ecosystem approach.

The Scoping Document sets out a roadmap and tools required to achieve an agreed strategic vision and high-level objectives for the plan area.

Context is everything. No plan for the marine environment can be written in isolation from the plethora of global and Mediterranean-wide agreements and conventions, national policies and programmes, and of course, existing sub-regional and local plans and policies. An MSP in the Mediterranean must be developed within the overarching ecosystem approach, taking into account the challenges of climate change and the interactions between the land and the sea.

Step 3. Map the Present: Analysing Existing Conditions

Gather and analyse information, including land-sea interactions, identify conflicts, coexistences and compatibilities.

This is the data and information gathering stage. It is all too easy at this stage to become subsumed by the oceans of data relating to the marine environment, resulting in the loss of valuable time and energy. Make the most of your time by working with stakeholders and key partners to gather the right information that fits the purpose of your plan and policies. Go for quality rather than quantity and keep it simple.

The value of indigenous knowledge cannot be understated particularly in the marine environment. Such indigenous knowledge includes the understandings, skills, and even philosophies developed by local communities and users with long histories and experiences of interaction with their marine surroundings.
Step 4. Map the Future: Analysing Future Conditions

Capture information on potential future trends and projections, key hot spots, and future scenarios for maritime uses.

At this stage the field of inquiry to the main elements, themes and issues which shape the future of the plan area. Future trends should be identified where possible. The use of future scenarios is strongly advocated; bringing together stakeholders and key social actors to ask “what-if” to help elaborate plausible futures for individual maritime uses, taking into considerations potential areas of conflict, coexistence and compatibility with other uses, along with the cumulative impacts on the environment. This is very much a qualitative stage, relying heavily on the expertise and knowledge of those with a stake in the future of the marine special plan area.

Step 5. Set the Parameters: Identifying Key Issues

Agreeing the key issues will bring focus to the design phase and set the direction of travel within clearly defined parameters.

The scope of the plan and its final form will take shape at this stage with the selection of the key issues you’re focusing on.

Step 6. Design the Plan: Elaborating the MSP Plan

Define and develop the planning measures, their location in space and time before consultation and publication.

The very particular measures that make up your marine spatial plan will be articulated at this stage. They potentially include not only spatial measures such as zoning, but also measures to manage activities in time. Other measures may include economic incentives and disincentives, along with regulation and enforcement, and in particular public education and awareness.

Future institutional arrangements for the delivery and monitoring of the plan must also be set out at this stage, ensuring the plan becomes a living document and that the key players continue to work together to deliver it. The plan should also establish the foundations for monitoring and evaluation through the use of monitoring protocols and indicators.

Step 7. Get Results: Implementing, Monitoring and Evaluating the Plan

Get formal approval, disseminate the plan, implement, monitor, evaluate.

Legitimacy through the political approval of the plan according to national legal requirements can take time and resources. The engagement and support of stakeholders and the community established through the preparation process will pay dividends at this stage. A wide dissemination of the plan and its vision long after its completion is essential to ensure that it plays a central role in the future sustainable development of the plan area.
GOVERNANCE AND MSP

Creating, articulating and delivering an agreed vision for the sustainable development of complex and dynamic coastal and marine zones is the fundamental challenge for MSP. Meeting this challenge requires a logical, coherent and efficient governance process for preparing and delivering marine spatial plans.

Additionally, whilst MSP is primarily a national issue, MSP in the Mediterranean may need to be delivered in the context of international and transboundary issues along with their reciprocal impacts and effects. Cross-border and transnational cooperation may therefore be essential components of the MSP governance process.

How to best shape the sustainable development of the coastal and marine zone?

Preparing and delivering your marine spatial plan requires a logical, coherent and efficient governance process to achieve the agreed vision for the sustainable development of the coastal and marine zone.
Meeting the Challenge

Successful governance practice will:

1. Include stakeholder involvement
2. Integrate and harmonize multiple interests
3. Have approval at the highest political level including inter-ministerial coordination for transboundary collaboration
4. Align with relevant plans and policies, including climate change adaptation and mitigation, transport, water quality and biodiversity
5. Use an effective regulatory framework (Article 8.1 of the ICZM Protocol)
6. Integrate both land and sea interactions (Article 3 of the ICZM Protocol)
7. Involve transboundary and international cooperation (Articles 14.1 and 28 of the ICZM Protocol) where appropriate
8. Regularly review and update governance plans in accordance with evolving conditions (Article 18.4 of the ICZM Protocol)

Preparation and communication are the key to success at every stage of the process.

Preparation gives you a sound foundation. Spend time establishing the institutional framework, stakeholder and social consensus, partnership structure and agreed time scales. Time spent preparing is time well spent. Follow our simple process to help make the most of the preparation process.

Communication enables partners and stakeholders to visualise problems, potential futures, solutions, and to facilitate the inclusion of a diverse range of social actors. Documents should not be over technical, be clearly written and in a widely accessible style and format. Keep it simple.

A successful planning process can only be achieved when:

1. A core group of well informed and supportive stakeholders actively support the process
2. There is sufficient institutional capacity to prepare the plan and to implement its policies
3. Government commitment to the plan is expressed by both legislation and the delegation of the necessary authority, along with the required financial resources
4. High-level objectives that address both societal and environmental conditions are adopted and used to measure the success of the plan
5. Relevant transboundary commitment, capacity and effective cooperation mechanisms have been put in place.
Too few marine spatial plans include climate change or consider adaptation and mitigation in planning objectives. We urgently need to include climate action in all plans and promote viable long-term actions that will contribute to mitigation goals and carbon neutrality. It is a major challenge for us internationally, but one we can face together.

Taking climate action is key to sustainable planning and management of the Mediterranean Sea (a region that is a hot spot for climate change). The impacts of climate change on the Mediterranean coastal and marine ecosystems on top of pressures of human activities, like tourism, shipping, oil and gas exploitation, fisheries and aquaculture call for better planning from beginning to end.

Among its objectives, the Protocol on ICZM in the Mediterranean (and its Common Regional Framework for ICZM) stresses the importance of preventing and reducing the effects of natural hazards and climate change, and consequently taking mitigation and adaptation measures. At the EU level, the MSP directive (2014/89/EC) recommends Member States to prepare maritime spatial plans, which advocate for a balanced and sustainable use of marine space. This implies the resolution of conflicts among different economic sectors, the improvement of synergy and on top of all the “preservation, protection and improvement of the environment, including resilience to climate change impacts”.

**Does your plan support climate action?**

The Mediterranean is a hot spot for climate change, with higher increases in water temperatures than other oceanic areas, and with fundamental implications for biodiversity, essential marine resources, and the safety of coastal communities and for ecosystems. Marine spatial plans must play an integral part in dealing with these challenges along with promoting actions to contribute to adaptation and mitigation goals.
A flexible marine spatial plan can adapt along the way as conditions change (i.e. new knowledge on the sea environment, new climate change projections and assessment of related impacts, evolution of the policy and socio-economic context, etc.). To achieve this, robust monitoring, evaluation and revision mechanism of MSP is needed at every stage. Dynamic ocean management is a way to rapidly adapt to changes in the ocean and its users, through the integration of near real-time biological, oceanographic, social and/or economic data. This approach can help address the challenges posed by the ongoing change of the climatic system and consequently of the oceanographic conditions. MSP can address operational aspects of climate change adaptation and mitigation by:

1. Solving new conflicts that may arise between marine sectors and between the sectors and the marine environment, due to new challenges posed by climate change.

2. Minimising economic losses deriving from choices that do not take into account risks associated with extreme weather and slow onset events.

3. Thinking ahead about spatial and temporal measures to enhance major maritime sectors’ climate change adaptation capacity.

4. Envisaging spatial measures directly targeted to promote the reduction of greenhouse gas emissions in several maritime sectors, in line with the Sustainable Development Goals (SGDs) of the UN 2030 Agenda, the Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas, and the European Green Deal.

### Placing along the MSP Process

**Climate change is a cross-cutting issue for MSP which should be considered throughout the entire planning process.** Collecting and structuring the information needed to take climate action into account throughout the MSP policy cycle. Built upon the *Conceptual Framework for MSP in the Mediterranean*, can be done according to the following questions:

#### Prepare: Starting the Process and Getting Organised

What are the MSP relevant sectors mainly affected by climate change? They refer to activities occurring at sea and to marine environmental aspects, but also to activities on the coast which might affect the sea environment and related uses.

#### Agree the Destination: Assessing the Context and Defining a Vision

What are the high-level MSP objectives affected by climate change? Are MSP vision and objectives coherent with long-term objectives of climate change mitigation and adaptation strategies and policies?

#### Map the Present and the Future: Analysing existing and Future Conditions

What are the main impacts of climate change affecting each sector or sub-sector? How would you briefly describe each identified impact? Are there specific marine areas particularly affected by those impacts? Can these areas be mapped?

#### Design the Plan: Identify Key Issues and Elaborating the Marine Spatial Plan

What are the adaptation and mitigation objectives of the sector which can be implemented through the plan? What are the adaptation measures for each identified sector and impact that can be promoted through the plan? Which adaptation measures are of primary interest?

#### Get Results: Monitoring and Evaluating the Plan

Having in mind the achievement of the adaptation objectives, what are the mitigation benefits associated with the previously identified adaptation measures? Is there any trade-off relevant in terms of mitigation? Besides improved adaptation and contribution to mitigation, what are the co-benefits of the identified measures (e.g. synergies with other sectors, biodiversity conservation, social equity, preservation of UCH sites, etc.)?
Other Tools and Practices

1. **OceanPlan** project investigates how marine spatial planning can both be affected by, and adapt to global climate change.

2. **National Maritime and Coastline Strategy** (France): adaptation of coastal management is recognised among important goals. Under its Axis 2, the Strategy recognises that existing maritime and coastal uses need to be adapted to make the economy and coastal development resilient against global change.

3. **Proposals for ICZM and MSP for the Emilia Romagna coast** (Italy): the study includes a summary qualitative evaluation of possible effects of climate change on the efficacy of some of the proposed spatial measures.

4. Integrating Climate Adaptation Planning and Maritime Spatial Planning in the **North Adriatic Basin**. This study supports decision makers with the identification of the more efficient strategies to cope with climate change challenges and maritime space management.

5. The Adriadapt project supports building local and regional resilience by developing the knowledge base required to identify and plan appropriate climate change adaptation options. As part of the project, a resilience information platform for Adriatic cities and towns has been created.

6. **Supreme project – Case study of Inner Ionian Sea- Corinthian Gulf**. Different spatial scenarios were elaborated to inform maritime spatial planning proposals for the area. Adaptation to climate change effects is included among the strategic goals and planning objectives of the pilot area.

7. **Supreme project – Case study of North Adriatic Sea**. Suitable areas for renewable energy production were identified, analyzing the case of offshore wind potential in the Emilia Romagna region. Potential increase of sand extraction for coastal defense works as adaptation to climate change is also considered.
ECOSYSTEM APPROACH

Ecosystem based management (also used interchangeably with Ecosystem approach) goes beyond examining single species, habitats, ecosystems or related functions in isolation. It can be used as an interdisciplinary and integrated approach to planning and management that recognises the richness and complexity of ecological systems and the continuous interactions among their components. Basing decision-making on ecological limits and spatial boundaries of ecosystems, as well as social integration, ecological and governance principles to preserve healthy and productive ecosystems and related services that achieve the sustainable use of natural resources.

Want to introduce healthy marine and coastal ecosystems into your guiding principles for policy and development?

Marine spatial plans must use the Ecosystem Approach as the guiding principle for all policy development and implementation undertaken under the auspices of the UNEP/MAP Barcelona Convention system. In the Mediterranean, the Ecosystem Approach is the guiding principle to all policy development and implementation undertaken under the auspices of the UNEP/MAP Barcelona Convention system, with the ultimate objective of achieving the Good Environmental Status (GES) of the Mediterranean Sea and Coast. It operates through the Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast (IMAP), which shares many common elements with the EU Marine Strategy Framework Directive. The ecosystem approach is a key principle of the ICZM Protocol of the Barcelona Convention to ensure that coastal planning and management allow the sustainable development of the coastal zone. It applies to all related planning processes of land and sea based marine activities, therefore underpinning the overall MSP implementation. Though not covering all Mediterranean countries, the EU MSP Directive also demonstrates the relevance of the ecosystem approach to “contribute to promoting the sustainable development and growth of the maritime and coastal economies and the sustainable use of marine and coastal resources”. Therefore, MSP is expected to contribute to the goals of IMAP and of the EU Marine Strategy Framework Directive.

More visible action and planning is called for in the marine space. By using the MSP process tools, guidance, case studies and examples of good practices you can include the ecosystem approach within plans to turn a well thought out concept into a successfully implemented programme.
**Ecosystem Approach**

The twelve guiding “Malawi principles” give us the key elements of the ecosystem approach from the Convention of Biological Diversity (CBD) which are mainly linked to the key MSP principles included in the EC MSP directive and in the Conceptual Framework for MSP in the Mediterranean.

The ecosystem approach requires that ecosystems are managed within their limits using an appropriate scale of analysis, considering working beyond administrative boundaries and taking a long-term approach to planning and management. Matching MSP and ecosystem boundaries, scales and timeframe represent one of the major challenges we want to work with you to overcome.

An appropriate balance between conservation goals and sustainable development goals is needed according to the ecosystem approach. Setting a clear vision and goals for the conservation of marine ecosystems, habitats and biodiversity is essential. Using the best available scientific knowledge, as well as reliable sources of ecological and environmental data and information is key to analysing the conditions of the marine environment and the impacts generated by the present and planned human activities. Applying the ecosystem approach usually requires transboundary data exchange, tools sharing, development of a common vision and related objectives. Reaching an agreement on common strategic directions is crucial to ensure the ecosystem approach is properly applied across marine borders.

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**Placing along the MSP Process**

The ecosystem approach shall be considered as a guiding approach for the entire MSP process and at all the stages of the MSP policy cycle:

**Prepare: Starting the Process and Getting Organised**

The ecosystem approach should be used from the beginning of the MSP process, e.g. when forming an interdisciplinary group of experts that include marine scientists, in order to support science-based decisions across the entire planning process. As is agreeing early on your definition of a long-term perspective for marine planning, adopting a wide spatial scale of analysis extending beyond administrative boundaries and considering interactions with land based human activities are also relevant from the beginning of the process.

**Agree the Destination: Assessing the Context and Defining a Vision**

Define a clear vision that contributes to delivering international and national goals and objectives for the protection of marine and coastal ecosystems and biodiversity. Defining conservation goals alongside economic development goals will set a course for achieving or maintaining the good environmental status (GES).

**Map the Present and the Future: Analysing Existing and Future Conditions**

The pressures and (cumulative) impacts of human activities on the marine resources need to be assessed and spatially represented. Conflicts and synergies between different uses of the marine space and Marine Protected Areas and other Area-based Effective Conservation Measures must be evaluated. Both current conditions and future scenarios should be included in these analyses. A quantitative approach is preferred, but it might be challenging due to frequently encountered barriers related to data availability and technical capacity.

**Design the Plan: Elaborating the Marine Spatial Plan**

Natural boundaries (for example the extension of seagrass meadows) need to be taken into account when identifying planning units and planning for future uses and related management measures. The possible impacts of newly planned activities that extend beyond the planning area (e.g. in the marine space of other countries) must be properly evaluated and minimised. The objectives and measures of economic development must not prevail over the objectives and measures for biodiversity conservation.
Get Results: Monitoring and Evaluating the Plan

Indicators are used to monitor the effects of planned maritime activities (and related measures) on the marine environment and their effectiveness in sustainably developing marine and coastal areas. Synergies with monitoring programs already in place to assess the environmental state of coastal marine waters (indicator systems set within IMAP at Mediterranean level and the MSFD and the WFD at European level) should be maximised. The plan needs to be regularly assessed and revised, also to include any change in policies or strategies setting more ambitious international conservation objectives.

Other Tools and Practices

1. **Tools4MSP** provides a suite of open-source tools to support the implementation of MSP; the cumulative effect assessment (CEA) tool in particular can be used for cumulative impact assessment of maritime activities on the marine environment.

2. Discover the application of the ecosystem approach, based on IMAP, in Montenegro, as part of the GEF Adriatic project [here](#).

3. The pilot project in the Western Mediterranean Sea basin (MSP Global initiative) developed two technical reports on current conditions and compatibility of maritime uses and future conditions and scenarios for MSP, using an ecosystem approach.

4. Updated information on the implementation of MSP across the EU, including implementation of ecosystem approach, is available at [EU MSP Platform](#).
Does your plan include LSI?

The incorporation of Land-Sea Interactions (LSI) into the marine spatial planning processes is critical to both the environmental protection of coastal areas as well as the effective development of maritime and coastal economies.

LAND-SEA INTERACTIONS

The term “Land-Sea Interactions” (LSI) is usually used in the context of planning and management of marine and coastal areas, setting out processes linking terrestrial and marine domains. Such processes may include nutrients and contaminants runoff from agriculture in rivers, and their consequent load in coastal waters, as well as the laying of a submarine pipe to connect an offshore O&G platform to the terrestrial pipeline network. Almost all maritime uses need support installations on land (such as the ports for shipping, marinas for yachting or grid connections for offshore wind farms). On the other hand, there are uses, mostly exerted on the ground (for example, beach tourism, waterfront, ports), that extend their domain to sea.
Place along the MSP Process

LSI analysis should be included from the beginning to the end of the process with focus given in three distinct phases:

1. **Context and Analysis Phase**
   Existing and potential interactions are identified based on the present conditions of the territory and the already planned developments.

2. **Analysis of Future Conditions**
   When could new interactions emerge (or disappear) due to the planning choices.

3. **MSP Design Phase**
   Actions to manage LSI can be included in the portfolio of measures.

Active engagement of stakeholders is a crucial component. It is essential that stakeholder engagement in LSI analysis is integrated as much as possible within the MSP. Engagement of stakeholders in the process is key for several aspects and phases of LSI analysis, such as the following:

1. Early engagement to reach a common understanding on the scope and objectives of the process
2. Identification of LSI
3. Collection of data on LSI and their spatial extent
4. Possible contribution to assessment of LSI relevance (on environment, economic sectors, society)
5. Identification of most relevant LSI (prioritisation)
6. Identification of recommendations and measures for the MSP plan

Use the step by step diagram on the following page to guide LSI analysis within the MSP process. Follow Part A for stocktaking, Part B for in-depth analysis, and Part C for informing the plan. Support for cataloguing the interactions and implementing the LSI stocktaking (Part A), along with the user manual, is available here.

Other tools and practices

1. Briefing paper of the DG MARE workshop on LSI analysis, June 2017, Malta: including different approaches to LSI.
2. Brochure **LSI in MSP**
3. ESPON 2020 project on MSP and LSI, including Croatian and Slovenian case studies.
4. Ongoing application of the SUPREME/SIMWESTMED guideline in the Maltese and Italian MSP

Some common categorisations are generally adopted in LSI analysis: i) LSI have double direction: from land toward sea and from sea toward land; ii) LSI can have natural or anthropogenic components.

LSI analysis should also consider the interactions of planning processes and plans for land and sea domains. 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.

LSI analysis shall be understood as an important component in the preparation of a marine plan. When carrying out MSP, it is important to consider the continuity between land and sea, and to ensure that spatial planning is conducted in an integrated manner across maritime and terrestrial areas. This is of interest for both the environmental protection of coastal areas and the effective development of maritime and coastal economies.

The specific objectives of LSI analysis are:

1. Identify and localise most relevant LSI, at present and in the future
2. Understand the spatial scope of LSIs and eventually localise hot spot areas
3. Identify measures, to be included within the marine spatial plan, aimed at managing impacts/synergies on marine activities and ecosystems, determined by land-sea interactions

Other tools and practices

1. Briefing paper of the DG MARE workshop on LSI analysis, June 2017, Malta: including different approaches to LSI.
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LAND-SEA INTERACTION ANALYSIS

Part A - Stocktaking

Step 1 Spatial Domain
Step 2 Identify LSI
Step 3 Localise LSI
Step 4 Describe & Assess

Step 5 Identify Policy, Legal & Planning Aspects

Step 8 Select Key LSI
Step 7 Identify & Engage Stakeholders

LSI Hot-Spots (preliminary)

Part B - In-Depth Analysis

Step 9 Spatial Analysis
Step 10 Quantitative Analysis
Step 11 Temporal Analysis

LSI spatial features, including hot-spots

Part C - Informing the Plan

Step 12 Recommendations, suggested measures

OTHER PLANNING PROCESSES

Key sector developments
Planning, policy, and regulatory sector elements
Territorial (land) planning developments

This diagram has been developed by PAPRAC UNEP/MAP to support marine spatial planning activities in the Mediterranean. For more planning tools and guidance visit msp.izmplatform.org