



# Marine monitoring: Ecosystem Approach, the UNEP/MAP experience



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# Regional Sea Conventions in Europe

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- 4 Regional Sea Conventions with European Parties:  
OSPAR Convention (OSPAR)  
Helsinki Convention (HELCOM)  
Barcelona Convention (UNEP/MAP)  
Bucharest Convention (Black Sea Commission)
- Barcelona Convention :  
Adopted in 1976, amended in 1995  
22 Contracting Parties  
Complemented by 7 Protocols



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# Ecosystem Approach: the UNEP MAP Experience

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- The Barcelona Convention and its 7 Protocols set the legal framework, key principles and obligations for the Mediterranean marine and coastal environmental protection, many of which are similar to the MSFD requirements
- The Convention and Protocols provide for a range of policy and management approaches and tools including ICZM and SPA creation;
- The ecosystem approach is the overarching principle of UNEP MAP for integration into all MAP policies;
- A specific Roadmap was agreed in 2008 to apply the ecosystem approach in order to define and achieve Good Environmental Status (GES).



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# Ecosystem Approach Roadmap: Seven Steps

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1. Definition of an Ecological Vision for the Mediterranean
2. Setting of common Mediterranean strategic goals
3. Identification of important ecosystem properties and assessment of ecological status and pressures
4. Development of a set of ecological objectives corresponding to the Vision and strategic goals
5. Derivation of operational objectives with indicators and target levels
6. Revision of existing monitoring programmes for ongoing assessment and regular updating of targets
7. Development and review of relevant action plans and programmes



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# Ecosystem Approach Roadmap: steps 2-4

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1. Biological diversity is maintained or enhanced. The quality and occurrence of coastal and marine habitats and the distribution and abundance of coastal and marine species are in line with prevailing physiographic, hydrographic, geographic and climatic conditions
2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystem
3. Populations of selected commercially exploited fish and shellfish are within biologically safe limits, exhibiting a population age and size distribution that is indicative of a healthy stock
4. Alterations to components of marine food webs caused by resource extraction or human-induced environmental changes do not have long-term adverse effects on food web dynamics and related viability



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## Ecosystem Approach Roadmap: steps 2-4

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5. Human-induced eutrophication is prevented, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms and oxygen deficiency in bottom waters
6. Sea-floor integrity is maintained, especially in priority benthic habitats
7. Alteration of hydrographic conditions does not adversely affect coastal and marine ecosystems
8. The natural dynamics of coastal areas are maintained and coastal ecosystems and landscapes are preserved
9. Contaminants cause no significant impact on coastal and marine ecosystems and human health
10. Marine and coastal litter do not adversely affect coastal and marine environment
11. Noise from human activities cause no significant impact on marine and coastal ecosystems



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# Ecosystem Approach Roadmap: steps 5-7

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5. Based on the 11 Ecological Objectives, regional targets, indicators, Good Environmental Status descriptions
6. Integrated Monitoring and Assessment Programme, with common regional indicators (IMAP)
7. Review of relevant Action Plans and Programmes is ongoing, with National Action Plans update as a major step



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# Integrated Monitoring and Assessment Program

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Key element of the Integrated Monitoring and Assessment Program (IMAP) is the integrated approach, through the following steps:

- At country level, development of Integrated Monitoring and Assessment Programmes, following region-wide agreed common indicators
- Development of common indicator assessment fact sheets, to link assessment and monitoring in a practical manner
- Assessment to be carried out in an integrated manner (overall status of GES - key products: 2017 Status Quality Report and 2019 State of Environment and Development Report)
- Implementation of IMAP to be supported by an Integrated Data and Information System (in line with IMAP delivery, region-wide, electronic format, with quality control and validation process)
- Cooperation among CPs and with regional bodies, to ensure cost-efficiency, exchange of best practices, and scientific adequacy



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# Ecosystem Approach: State of Play (Step 7)

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Development and review of relevant action plans and programmes:

1. Streamline GES targets in the Programmes of Measures adopted in the framework of Barcelona Convention and its Protocols:
  - *Regional Plan on Marine Litter, 2013*
  - *SAP BIO update*
  - *Regional Strategy to Combat Pollution from Ships*
  - *Action Plan to Implement Offshore Protocol*
2. Updated NAPs under the LBS Protocol to achieve GES on pollution and litter
3. Gap Analysis on existing UNEP MAP Measures was undertaken in light of achieving GES targets.



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# Next Steps and Challenges

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- Finalize gap analysis of programmes of measures adopted under the Barcelona Convention and its Protocols to assess the need for new or updated ones to achieve GES;
- In collaboration with regional Partners define an efficient governance mechanism to aid a coordinated implementation of the IMAP by the all Mediterranean countries including financial support;
- Support the implementation of the IMAP;
- Support and coordinate research work on behalf of the IMAP and programmes of measures implementation with relevant partners and research projects;
- Establish an efficient information system to collect and process data coming from the IMAP implementation based on SEIS principles.



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# Contact

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