



**Mediterranean needs, responses and gaps:
goals and principles of
MED POL Phase IV Programme (2006-2013)**

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The presentation is focused on monitoring and forecasting which is an extract from D6.1

Asus; 6/5/2006



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Overall Objectives and Goals

- to facilitate the implementation of the Convention and its Protocols by the Contracting Parties, in particular in the reduction and elimination of pollution from land-based sources and dumping activities;
- to assess all point and diffuse sources and load of pollution reaching the Mediterranean, and the magnitude of the problems caused by the effects of contaminants on living and non-living resources, including human health, as well as on amenities and uses of the marine and coastal regions
- to assess status and trends in the quality of the marine and coastal environment as an early warning system for potential environmental problems caused by pollution and other anthropogenic pressures;
- to monitor the implementation of the action plans, programmes and measures for the control of pollution and assess their effectiveness
- to contribute, in cooperation with other MAP components, to the application of the ecosystem approach to the management of human activities within MAP, with MED POL as the monitoring and assessment component.





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Needs to assess all point and diffuse sources and load of pollution reaching the Mediterranean

Quantification of **releases from diffuse sources** focusing on:

- Loads of substances from the hydrological basin of the Mediterranean
- Atmospheric deposition of nutrients and hazardous substances

Through the use of models that require availability of data with acceptable time and space coverage

Any other option?





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Needs to assess status and trends in the quality of the marine and coastal environment

Use of other tools in addition to national monitoring programmes in order to prepare regional assessments, such as:

- Regional/sub-regional surveys (e.g. for the baseline contamination level of the sea) conducted with a common methodology, to fill the geographical and methodological gaps in data
- Use and further develop the services of operational oceanography
- Routine use of satellite images





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Needs to assess status and trends in the quality of the marine and coastal environment

As to temporal trend monitoring of contamination and eutrophication:

- Selection of the most suitable media for the precise detection of the trend (or zero trend) and the most correct sampling strategy
- Selection of the most suitable location for following trends in contamination (e.g. selection of sediment hot spots)
- Propose different methods for statistical analysis of data having different temporal coverage in terms of sampling frequencies





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Needs to assess status and trends in the quality of the marine and coastal environment

As to eutrophication monitoring and assessment:

- Identification of biological indicators (parameters and indexes) for eutrophication monitoring and assessment
- The response of marine ecosystems to inputs of nutrient inputs (impact of changing N/P ratios, contribution of dissolved and particulate organic forms besides inorganic forms) in relation to eutrophication.

Identification of background values for different indicators of pollution and eutrophication: Important for setting EQOs or environmental targets and for the assessments





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Needs for understanding the effects of contaminants on living and non-living resources; in particular:

- Responses of biological community to polluted sediments
- The natural recovery of contaminated sediments versus sediment clean-up (e.g. impacts of dredging activities on coastal ecosystems and human health)
- Impacts of aquaculture activities in Mediterranean coastal waters
- Further development of biomarkers (or any other relevant impact indicator) for the individual effects of different pollutants.





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Needs concerning the application of the ecosystem approach to the management of human activities within MAP, with MED POL as the monitoring and assessment component.

Approaches for defining good environmental status and setting EQOs are required





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Managerial/policy Needs

- to facilitate the implementation of the Convention and its Protocols by the Contracting Parties, in particular in the reduction and elimination of pollution from land-based sources and activities and dumping activities
- to monitor the implementation of the action plans, programmes and measures for the control of pollution and assess their effectiveness

Development of different scenarios for achieving the pollution reduction process in the region: the application of the burden sharing principle?





International Action for Sustainability of the Mediterranean and Black Sea Environment



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Final Scientific Conference - Istanbul, 11 May 2006

