

Implementation of the Marine Strategy Framework Directive in Romania

Initial Assessment and determination of GES

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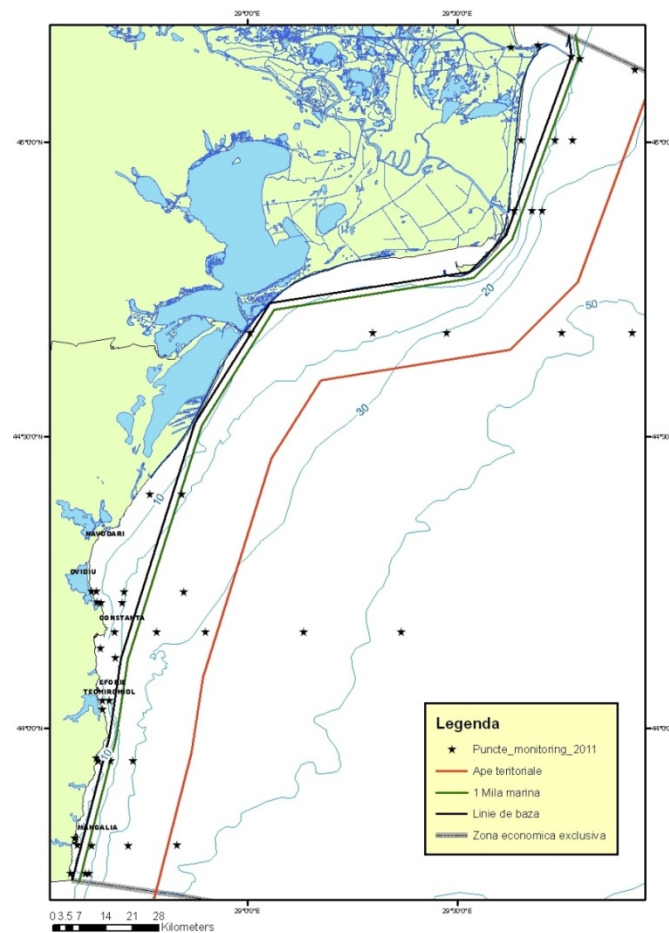
Black Sea Basin



Danube is the largest tributary to the Black Sea and influence marine water quality particularly in the north west shelf



Romanian Black Sea Shoreline



Importance of the MSFD for Romania

- Romania is covered 100 % in the Black Sea river basin and all its water is discharged into the Black Sea.
- The Danube is discharging its waters, through the Danube Delta into the Black Sea on the Romanian territory
- The Black Sea seside is the most important touristic area
- The state of the Black Sea influence the measures taken on the Romanian territory particularly related to the waste water treatment and reduction of pollution with nutrients (defining role for sensitive areas and vulnerable zones).

State of play

Transposition

- ❖ Emergency Governmental Ordinance 71/2010 and adopted by Law 6/2011

Actual implementation:

- Initial assessment (art.8)
- Determination of GES (art.9)
- Set up the environmental targets (art. 10)
- Updating monitoring programme (art.11)

Competent authorities

- **Ministry of Environment, Water and Forests**
- *National Administration Romanian Waters*
- *Danube Delta Biosphere Reserve Administration*
- *National Environmental Guard*
- **Ministry of Agriculture and Rural Development**
- *National Agency for Fishery and Aquaculture*
- **Ministry of Interior**
- *Coast Guard*
- **Ministry of Transport**
- *Romanian Naval Authority*
- **Ministry of Energy**
- National Institute for Marine Research

Regional Coordination

- Black Sea Commission
- Joint Romanian-Bulgarian Commission for the cooperation on water management
- International Commission for the Protection of the Danube River

Initial Assessment (1)

- It was done using a mixed approach
 - description of the physico-chemical and biological characteristics of the marine environment,*
 - description of the pressures on the marine environment (e.g. nutrient and organic matter enrichment, contamination by hazardous substances) and the activities causing the pressures (maritime transport, hydraulic constructions, tourism and fishing)*
- Marine waters includes three areas :
 - “Coast” defined as lying between the Periboina –Vama Veche –Mangalia
 - “Transitional” defined as lying between the Chilia – Periboina
 - “Marine” defined as marine waters from 1nm to shelf waters (50m isobath), between the Sulina – Vama Veche

Initial Assessment (2)

- Regional cooperation is presented particularly the cooperation with Bulgaria and Black Sea Commission
- Economic and social analysis of marine has used the water accounts approach. The activities described include industry, ports, tourism, aquaculture and fisheries, offshore structures, oil and gas exploitation, shipping, waste disposal.
- The economic and social analysis of the cost of degradation is undertaken using the cost-based approach. The degradation costs were assessed based on the costs of the measures adopted to protect the marine environment.

Gaps

- Missing data
- Missing methods to identify the features of some descriptors
- Wrong interpretation

Major environmental problems

- Eutrophication/nutrient enrichment
- Changes in marine living resources
- Chemical pollution (including oil)
- Biodiversity/habitat changes, including alien species introduction

Major Pressures

- Pollution from land based sources
- Marine traffic and oil spills
- Invasive species and overfishing
- Excessive and illegal logging
- Intensive agriculture
- Unsustainable coastal development are problems on land.
- Region is vulnerable to climate change

GES and Target definition

- Due to the lack of information there is not a comprehensive definition of a state to be achieved or maintained
- GES and/or targets are not defined for some descriptors
- The definitions across descriptors are for some of them very specific and quantitative
- Not all pressures are reported i.e. noise, waste
- There is still a need to assess information on knowledge gaps

Descriptor 5 Eutrophication-indicators

- **Indicator 1** Good environmental status is achieved by maintaining current levels of nutrient concentrations in the water column in the high seas and their decline near pollution sources on and, particularly around the treatment plants near the large urban areas.
- **Indicator 2** N / P ratio is more than 10.
- **Indicator 3** Decreasing the current chlorophyll concentrations,
- **Indicator 4** Maintaining transparency between 3-9 m.
- **Indicator 5** Decreasing the algal biomass and the effects that can occur near pollution sources on land.

Descriptor 5 Eutrophication-target

- Inputs of nutrients from land-based sources of pollution, point and diffuse sources, including waterways, are at levels that do not cause increased eutrophication and do not affect human health and biodiversity through:
 - Reduction / prohibition of the use of phosphate-based detergents;
 - Improved farming practices to reduce nitrogen and phosphorus pollution;
 - Modernization of water treatment so that the concentration levels of the receiving marine waters would achieve good ecological status

Descriptor 3 (Commercial fish and shellfish)

- **GES indicator**

Horse mackerel – HMM – Maintaining GES when fishing mortality for horse mackerel is not increasing

- **Targets**

- Sprat fishing effort should be diminished with 25%
- The Turbot fishing effort should be diminished with 600%
- The Whiting fishing effort should be diminished with 65%
- The Dogfish fishing effort should be diminished with 15%

Development of GES and targets

Descriptor	GES defined	Target defined
D1 Biological Diversity/Fish	No	No
D1 Biological Diversity /Mammals	Yes	Yes
D1 Biological Diversity /Birds	Yes	Yes
D1 Biological Diversity/Habitats	Yes	Yes
D1 Biological Diversity/Water	Yes	Yes
D2 Non-indigenous species	No	No
D3 Commercially exploited fish and shellfish	Yes	Yes
D4 Marine food webs	No	Yes
D5 Human-induced eutrophication	Yes	Yes
D6 Sea-floor integrity	No	Yes
D7 Alteration of hydrographical conditions	No	No
D8 Contaminants in water and sediments	Yes	Yes
D9 Contaminants in fish and seafood	Yes	Yes
D10 Marine litter	No	Yes
D11 Introduced energy including sounds	No	No

Need for improvements

- Improving knowledge in order to fill gaps, particularly for open sea for biological elements, waste, noise
- Improve the institutional capacity through training for using new monitoring and assessment methods for contaminants, biological elements (angiosperm, macroalge), sampling, treatment and analysis for samples from different matrixes (with focus on biota samples);
- Improve capacity for economic analysis to set up and assess the sustainability of the protection measures

Thank you very much for your attention!

