

**Regional Meeting on NAPs
implementation – Lessons
learned and the way forward
Marseille, 17-18 October 2016**



Updated National Action Plans/POM of GREECE

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Marseille, October 2016**

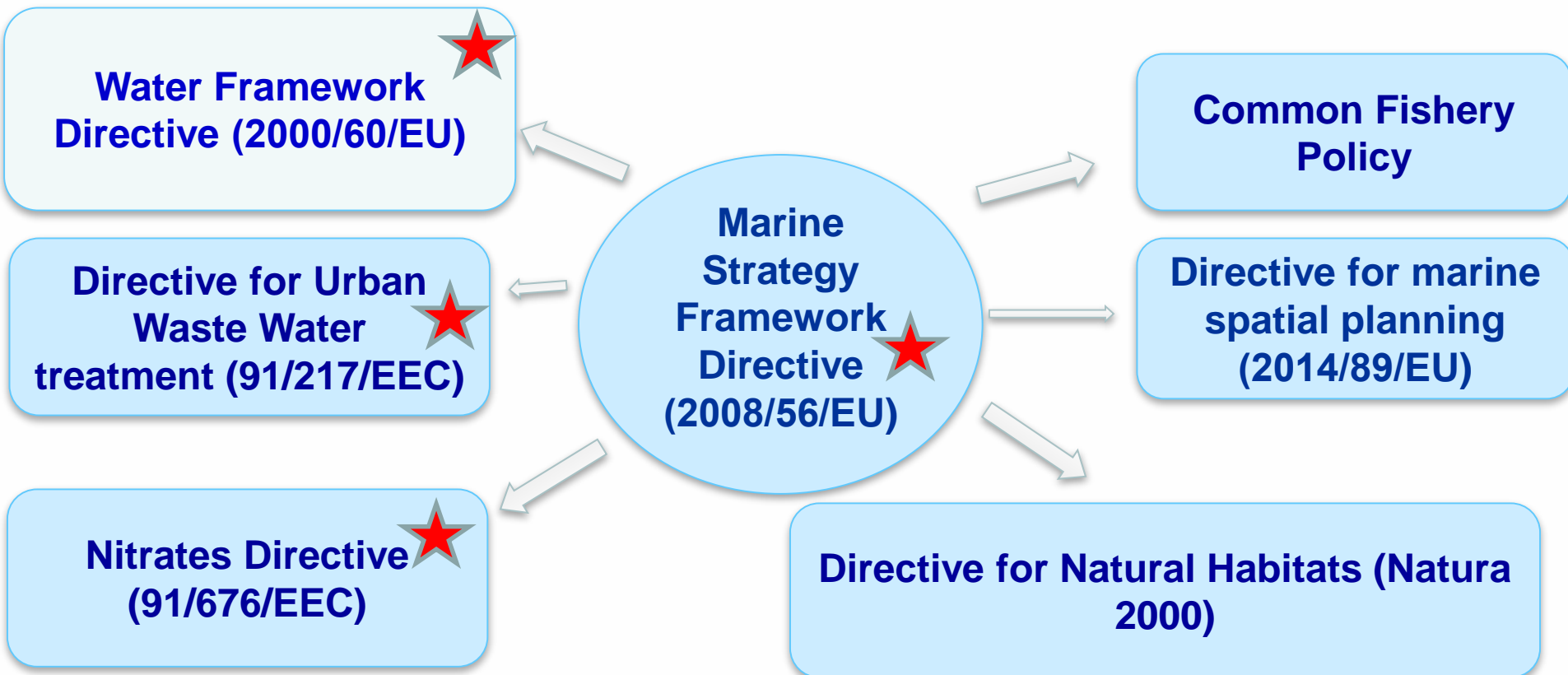


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The Special Secretariat for Water is the competent authority for the implementation of the **Marine Strategy Framework Directive (2008/56/EU)** in Greece

Legal Instruments for the effective protection of Marine Environment at European Level



Focusing on MSFD - Current status in Greece

In line with MSFD provisions, the National Action Plans for each marine sub-region will be developed through the following stages:

1. Preparation of NAPs
2. Development & implementation of POMs

Completed steps of the “Preparation” stage, by Ministerial Decision:

- I. Initial assessment of environmental status (✓)*
- II. Identification of Good Environmental Status (GES) (✓)*
- III. Identification of Environmental Objectives (EO) Indicators (✓)*



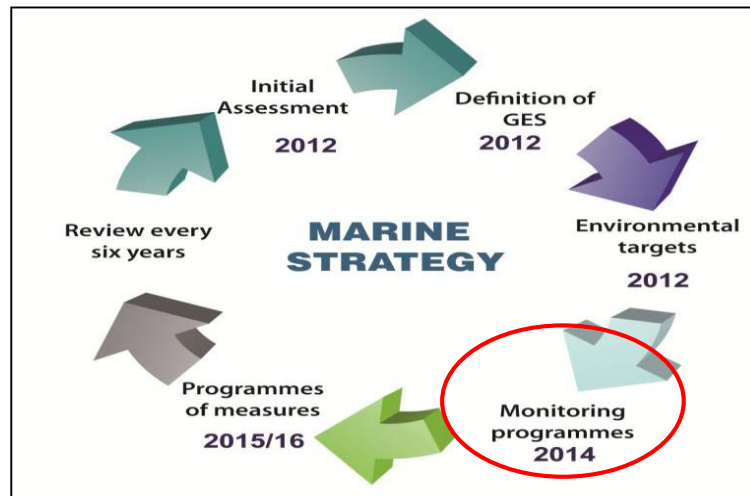
Establishment of National Monitoring Programmes
(The public consultation has been concluded and the draft Ministerial Decision is to be approved and published in the Gov. Gazzete)

SSW OBJECTIVES – Process followed

The Special Secretary for Water, Prof J. Ganoulis, has proceeded with the following steps regarding the implementation of the MSFD:

- Organizing a task force for action on drafting the programs of measures
- Brought together stakeholders
- Achieved to increase the financial resources for MSFD implementation
- Accelerates the procedures to harmonize with the MSFD timetable (six year circle) (Monitoring programmes are on going)

Iterative process foreseen under MSFD



MSFD monitoring programmes (specifications/key directions)

MSFD monitoring programmes:

- will be a **combination of new monitoring activities and ongoing monitoring activities**, deriving from other legal obligations
- **were at a pilot phase during 2015**, they will be operational by the end of 2016 in order to evaluate the reliability of targets and accuracy of thresholds described in the Greek Initial Assessment of the environmental quality of the Greek Seas
- **adoption procedures for the MSFD monitoring programmes are ongoing (through Ministerial Decision)**



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MSFD monitoring programs (specifications/key directions)

The Greek MSFD monitoring programs will be an "on-going assessment of the environmental status". Monitoring requirements derive from EU Directives. National & international legal obligations will also be linked or combined. Thus, the MSFD monitoring programmes will integrate existing monitoring programs and relevant guidance:

- Monitoring program of the marine sites of the Greek Natura-2000 network, deriving from the **Habitats & Birds Directives (HD &BD)**.
- Monitoring program of the Greek water bodies (as defined by the **Water Framework Directive**). The program is operational since 2012.
- Program of Essential Habitat mapping (as defined by the **European Regulation for Mediterranean Fisheries 1969/2006**). The program is operational since 2015 while the seagrass mapping is already published. The next step is the "maerl" habitats mapping foreseen for 2016-2020
- The POSEIDON network of "real time" monitoring of oceanographic parameters (www.poseidon.hcmr.gr) and the Greek network for alien species monitoring ELNAIS (<http://elnais.hcmr.gr>)
- The national framework program of Data of Fisheries Collection (DCF), under the EU common fisheries policy - The Greek network for seafood control
- **The UNEP/MAP/MEDPOL pollution monitoring (Under Regional Sea Convention for Mediterranean- Barcelona Convention)**

Objectives for Updating the NAPs

D5 (Eutrophication):

Outcomes from the Initial Assessment:

- Marine environment is generally presented as oligotrophic and river inflows are limited in the North Aegean.
- Hot spots (with occasionally eutrophic conditions) are located at coastal areas in bays/gulfs.
- Only 5% of the assessment areas fall short of the good status
- Hot spots will be of high priority in the future PoM



Objectives for Updating the NAPs

Eutrophication (D5):

Environmental targets:

- 1) Reduction in nutrients and organic matter loads entering the marine environment from point and diffused sources
- 2) Reduction in nitro pollution caused by agricultural activities according to Good Agricultural Practice in order to reduce the amounts of nutrients entering coastal waters

Common associated indicators to both targets:

- 1) Chlorophyll concentration
- 2) Abundance of harmful phytoplankton
- 3) Presence and abundance of macroalgae
- 4) Nutrient concentrations



Priority Measures (D5)

General Principles:

- Hot spots will be of high priority in the Program of Measures.
- **WFD for inland waters** (Directive 2000/60/EK), **Directive for urban waste water treatment & disposal** (Directive 91/271/EOK), and its **amendments** (Direct 98/15/EE), as well as **Directive for Nitrate Pollution** (1991) will facilitate the achievement of the above mentioned environmental targets.
- The achievement of GES in hot spots is considered to be possible by 2020.

The conservation - achievement of GES and mitigation of Alga Blooms (eutrophication incidents) requires:

- reduction of nutrients' inflows via river systems
- universal and proper operation of Waste Water Treatment Plants
- limitations in the use of fertilizers in agricultural activities towards the reduction of the nutrient loads coming from leaching soils
- studies on the N-P cycles and descriptions of flora composition and abundance of species in marine environment focusing on coastal hot spots



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Priority Measures (D5)

Regional Measures under the Barcelona Convention, contributing to achieving MSFD GES:

- *LBS Protocol of the Barcelona Convention*
- *Strategic Action Plan to address pollution from land-based activities in the Mediterranean (SAP Med) and National Action Plan*
- *Programme for the Assessment and Control of Pollution in the Mediterranean (MED POL)*
- *Decision IG.19/7 "Regional Plan on the reduction of BOD₅ from urban waste water in the framework of the implementation of Article 15 of the LBS Protocol "*
- *Decision IG.20/8.2 "Regional Plan on the reduction of BOD₅ in the food sector in the framework of the implementation of Article 15 of the LBS Protocol"*



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Objectives for Updating the NAPs

Contaminants in Sea Food (D9):

Outcomes from the Initial Assessment :

- Marine waters in all sub regions are generally of good environmental status (as regards levels, number & frequency of limit level exceedance for contaminants)
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Objectives for Updating the NAPs

Contaminants in Sea Food (D9):

Environmental target:

Maintaining contaminants concentrations in fish and other seafood destined for human consumption at permissible levels

Associated indicators:

- 1) Contaminants concentrations in fish and other seafood destined for human consumption
- 2) The number of contaminants in fish and other seafood destined for human consumption.



Objectives for Updating the NAPs

For the identification of GES the following will be considered:

- Regulation of the EU No 1881/2006 for fish and seafood,
- Assessment criteria for heavy metals, PCBs and PAHs in mussels and oysters and fish (OSPAR),
- Directive 2006/118/EC,
- Ecotoxicological Assessment Criteria for water,
- EPA National Recommended Water Quality Criteria



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Priority Measures (D9)

The conservation / achievement of GES mainly requires:

- the development of the appropriate strategy – protocol for monitoring of contaminants concentrations focusing on seafood & fishes that come from hot spot areas (concerning fishing) as well as fishes high in the food chain and strongly affected by bioaccumulation.
- the simultaneous consideration of D9 and D8 given that both of them are referred to contaminants and related targets are consistent.

In that context,

- Water Framework Directive (2000/60/EU),
- Directive for Urban Waste Water treatment (91/271/EEC)
- Dangerous Substances Directive, as amended 2006/11/EC

facilitate the achievement of those targets

Priority Measures (D9)

Regional Measures under the Barcelona Convention, contributing to achieving MSFD GES:

- *LBS Protocol of the Barcelona Convention*
- *Strategic Action Plan to address pollution from land-based activities in the Mediterranean (SAP Med) and National Action Plan*
- *Programme for the Assessment and Control of Pollution in the Mediterranean (MED POL)*
- *Decision IG.19/8 "Regional Plan on the elimination of Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Mirex and Toxaphene in the framework of the implementation of Article 15 of the LBS Protocol"*
- *Decision IG.19/9 "Regional Plan on the phasing out of DDT in the framework of the implementation of Article 15 of the LBS Protocol"*
- *Decision IG.20/8.1 Regional Plan on the reduction of inputs of Mercury in the framework of the implementation of Article 15 of the LBS Protocol*
- *Decision IG.20/8.3 Regional Plan on the elimination in the framework of the implementation of Article 15 of the LBS Protocol, 1996 of Alpha hexachlorocyclohexane; Beta hexachlorocyclohexane; Hexabromobiphenyl; Chlordecone; Pentachlorobenzene; Tetrabromodiphenyl ether and Pentabromodiphenyl ether; Hexabromodiphenyl ether and Heptabromodiphenyl ether; Lindane; Endosulfan, Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride*
- *Protocol of the Barcelona Convention concerning the Protection of the Mediterranean Sea Against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil*
- *Decision IG.20/12 Action Plan to implement the Protocol of the Barcelona Convention concerning the Protection of the Mediterranean Sea Against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil*
- *Decision IG.22/3 Mediterranean Offshore Action Plan in the framework of the Protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil*
- *Decision IG.22/4 Regional Strategy for Prevention of and Response to Marine Pollution from Ships (2016-2021)*
- *Decision IG.22/5 Regional Action Plan on Sustainable Consumption and Production in the Mediterranean*



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Objectives for Updating the NAPs

Marine litter (D10):

Outcomes from the Initial Assessment:

- Difficulties in initial assessment within assessment areas due to serious gaps and shortcomings in available data (especially in open sea environment) and lack of existing knowledge & standardized methodologies



Objectives for Updating the NAPs

Marine litter (D10):

Environmental target:

The reduction in litter of anthropogenic origin from the coastal and marine environment.

Associated indicator:

The composition, distribution, quantity and origin of litter found on coasts, in the water column and the sea bottom.



Objectives for Updating the NAPs

Existing data sets – existing knowledge

- *National and International research projects dealing with beach litter , water column and seafloor litter* [Kougiourouki et al. 2000, Karapanagioti and Klontza 2007, Kornilios et al.1998, Stefatos et al.1999, Katsanevakis and Katsarou, 2004, Koutsodendris et al.2008, Sanchez et al 2011, Smith et al 2011 &2012,Anastasopoulou et al. 2012, Anastasopoulou et al 2013a,b}
- *Limited time series in the Gulf of Patras*
- *Beach cleaning schemes by NGOs*
- *Collection of floating items be NGOs (HELMEPA)*

Methods used:

Beach collection

Diving and underwater video cameras or ROVs

Optical observation of floating

Trawling

Analysis of fish stomachs

There are no standardized methodologies in Greece



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Priority Measures (D10)

- **Objectives for Marine litter in coastal and open sea environments includes:**
- Decrease of the number of items
 - Development of standardized sampling methods
 - Analysis of the distribution and the sources of marine litter towards the implementation of management measures
 - Study of the processes involving the transport and fate of microparticles in the marine environment
 - Development of management schemes of marine litter and coordination of the responsible national authorities
 - Development of the appropriate sampling methods for the monitoring of marine litter in marine organisms

Scientific knowledge on the impact of marine litter on biota should be gained through research studies



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Priority Measures (D10)

The GES achievement demands:

- the development of a common method for monitoring of composition, distribution and sources of items at sea coasts, sea water column and seabed
- regular monitoring and knowledge on the impacts on marine organisms
- coordinated implementation of marine litter management policy
- development of assessment criteria of GES for marine litter
- public awareness through training programs concerning sustainable development and other initiatives for the reduction of the items

Implementation of the Water Framework Directive & HORIZON 2020 as well as national legislative framework for waste management and protection of the environment will facilitate the achievement of the environmental targets for D10.



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Priority Measures (D10)

Regionally Coordinated Measures - Measures under the Barcelona Convention, contributing to achieving MSFD GES:

- LBS Protocol of the Barcelona Convention
- Decision IG.21/7 Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Land Based Sources Protocol
- Decision IG.22/5 Regional Action Plan on Sustainable Consumption and Production in the Mediterranean
- Decision IG.22/2 Mediterranean Strategy for Sustainable Development 2016-2025



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General conclusions

- The Special Secretariat for Water **has already determined the monitoring programmes** and has started to elaborate on the programs of measures.
- Due to the responsibility for the implementation of the Water Framework Directive, the Directive for Urban Waste Water treatment and the Nitrates Directive, the SSW has already the basis for the monitoring of the coastal waters and part of the territorial waters. The measures adopted according to the aforementioned Directives will also be included.
- The Directive for Natural Habitats also provides a basis for monitoring and measures that could be included in those of the MSFD.
- The outcomes of the Initial Assessment, the existing legislative framework & implemented measures should be taken into account within the development of the MSFD PoMs in order to tackle marine environment protection issues effectively.
- With regard to targets an important conclusion made in the Technical Assessment is that ***“many environmental targets are monitoring targets”***.
- The combination of the above mentioned with the results of the monitoring programmes will assist in the identification of gaps as regards the specification of robust new measures to be incorporated into the Program of Measures.

General conclusions

- According to the MSFD, the development of the program of measures would need to be coordinated within marine regions. The Regional Seas Conventions can and should play a key role in this process.
- The work of the Barcelona Convention in relation to common & local measures has already focused on the analysis of existing measures and gaps analysis.



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Thank you for your attention



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