WFD AND MSFD INCORPORATION INTO THE GREEK LEGISLATION

EU PROJECT "PERSEUS" First Training school for the promotion and application of EU Marine Environmental Policy Frameworks in non-EU Mediterranean and Black Sea countries. Chios, Greece, 4-8 June 2012

WFD environmental “obligations”

- Achieve and maintain **“good ecological and chemical”status** for **all** waters by 2015

- **Prevent deterioration** of the current status of waters by:
  - Promoting sustainable water use
  - Protecting the aquatic environment via *inter alia* ensuring progressive reduction of pollution
  - Mitigating the effects of floods and droughts

A new approach to water

Outstanding new principles:

- Integrated view of waters
- Integration of policies
- River basin as the management scale
- Public participation and active involvement of stakeholders
- Economics (economic analysis of water uses and services, cost-recovery, cost-effectiveness analysis)

In four words...**Integrated River Basin Management**

Encompassing all waters

- **Surface**: Inland, transitional, coastal
- **Groundwater**: Below surface
- Plus **terrestrial ecosystems and wetlands** directly depending on surface and ground waters
- **"Water bodies"**: Unit of water where good ecological & chemical status (GECS) must be achieved

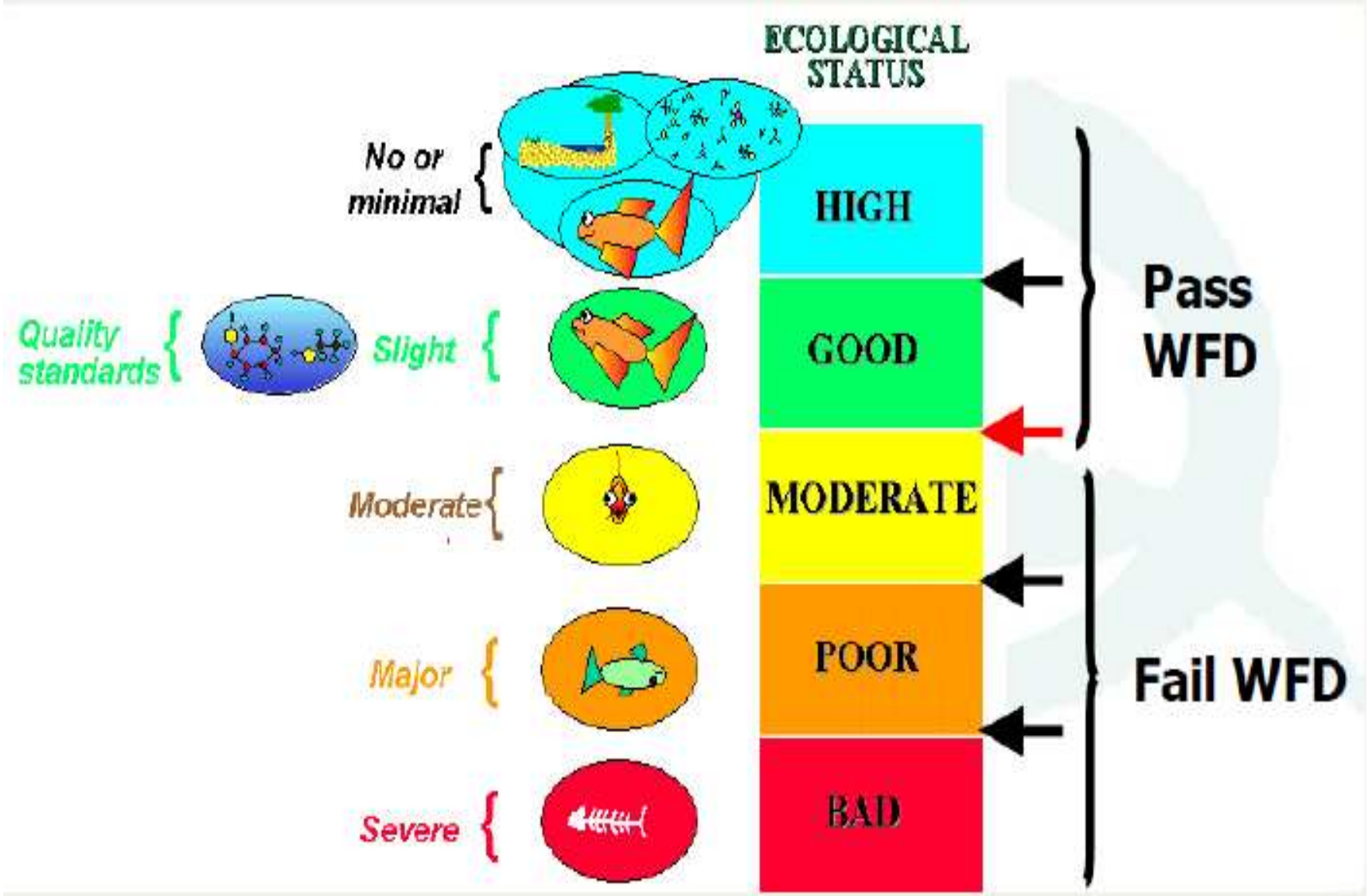
Good Ecological and Chemical Status

Ecological status-Sum of biological ,physico-chemical (nutrients, temperature)and hydromorphological (flow) elements

Chemical status-Fulfillment of EU standards for certain chemical substances

Good-Slight deviation of biological elements from undisturbed conditions (reference or “high”)(classification includes “high”, “moderate” and “bad”)

Prevent deterioration-Do not make things worse! -A prerequisite to achieve/maintain “good status”


ECOLOGICAL STATUS
No or minimal
Quality standards
Slight
Moderate
Major
Severe
HIGH
GOOD
MODERATE
POOR
BAD
Pass WFD
Fail WFD

Good Ecological and Chemical Status for groundwater

Good chemical status-As before, plus no effects on other waters

Good quantitative status -Water abstractions < long-term rate of recharge plus adequate flow for wetlands and water-dependent terrestrial ecosystems

Prevent deterioration-Do not make things worse!

Procedural obligations to achieve Good Ecological and Chemical Status

- Implementation of all existing EU-legislation with a "water protection" aspect
- Extra protection for protected areas
- Introduce(real)water pricing
- Reduction of emissions of pollutants in general plus phase-out or cessation of the most "dangerous" ones
- Wetland restoration
- Water "conservation" (use efficiency etc.)measures etc.
- **Water planning and management at the whole river basin level**(including transboundary) -IRBM

Timetable of implementation

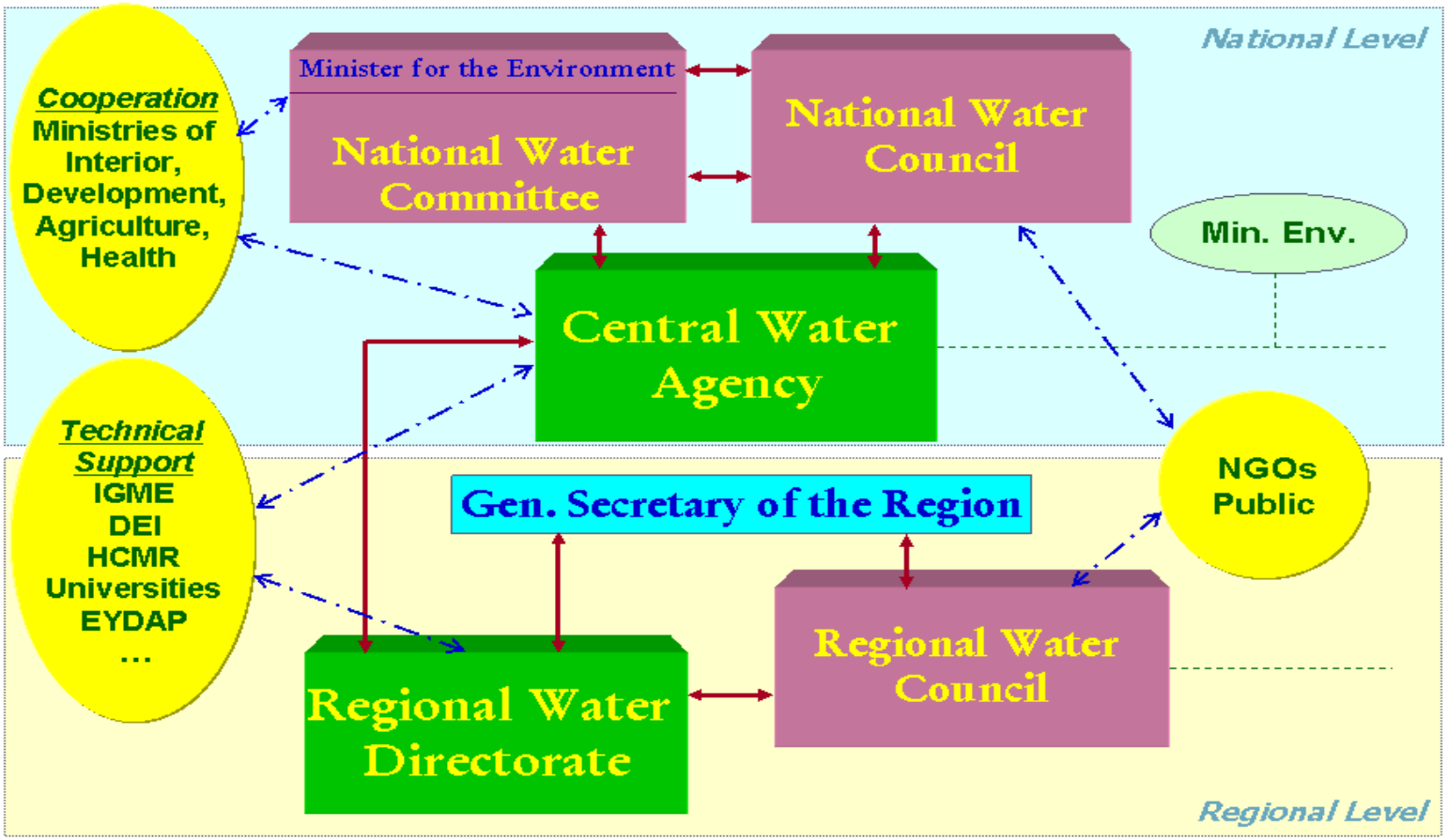
Year	Issue	Reference
2000	Directive entered into force	Art. 25
2003	Transposition in national legislation Identification of River Basin Districts and Authorities	Art. 23 Art. 3
2004	Characterisation of river basin: pressures, impacts and economic analysis	Art. 5
2006	Establishment of monitoring network Start public consultation (at the latest)	Art. 8 Art. 14
2008	Present draft river basin management plan	Art. 13
2009	Finalise river basin management plan including progamme of measures	Art. 13 & 11
2010	Introduce pricing policies	Art. 9
2012	Make operational programmes of measures	Art. 11
2015	Meet environmental objectives First management cycle ends Second river basin management plan & first flood risk management plan.	Art. 4
2021	Second management cycle ends	Art. 4 & 13
2027	Third management cycle ends, final deadline for meeting objectives	Art. 4 & 13

New legislative framework on water policy in Greece

Law 3199/9-12-2003 (Official Journal of the Government - OJG 280A/2003) on water protection and the sustainable management of water resources,

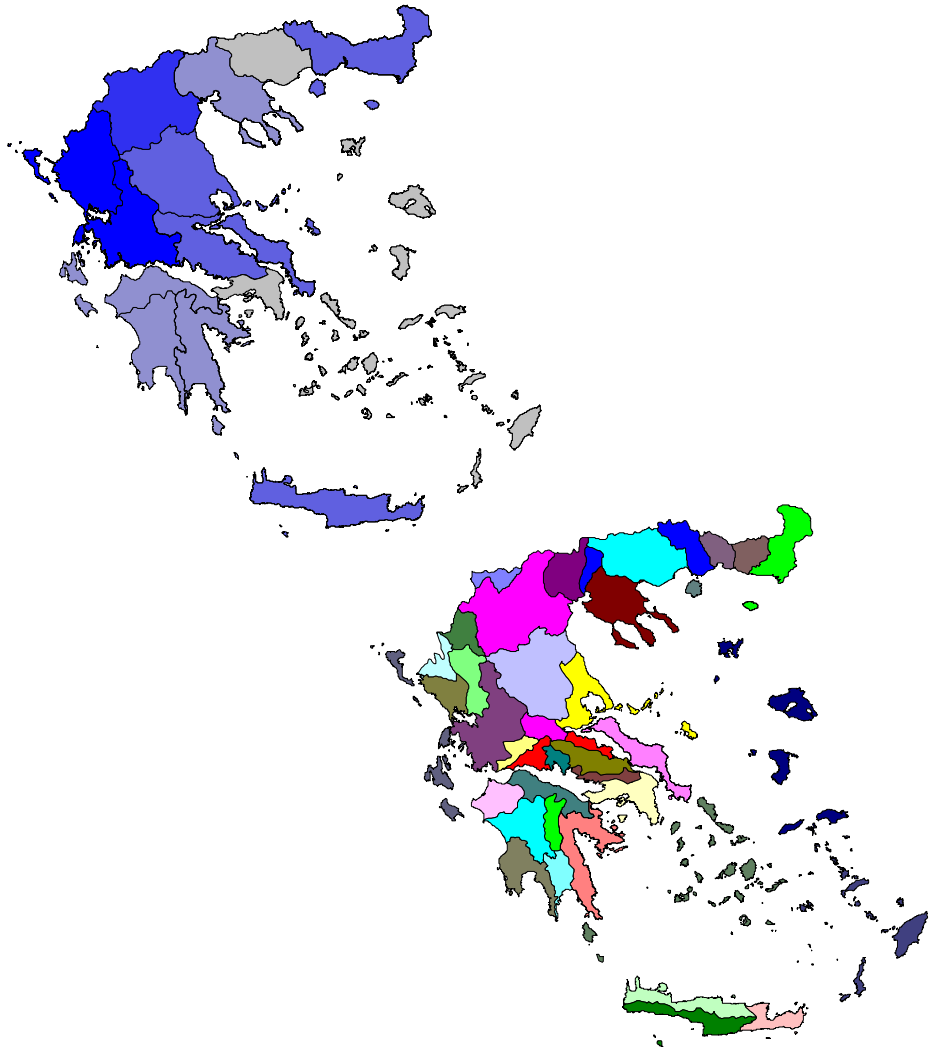
PD 51/8-3-2007, which transpose the EU Water Framework Directive (WFD) (2000/60/EC) into the national legislation.

Institutional Framework



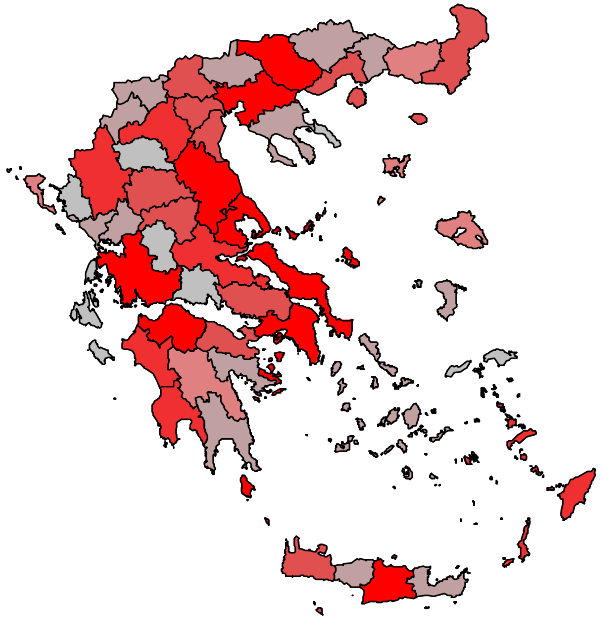
Country particularities

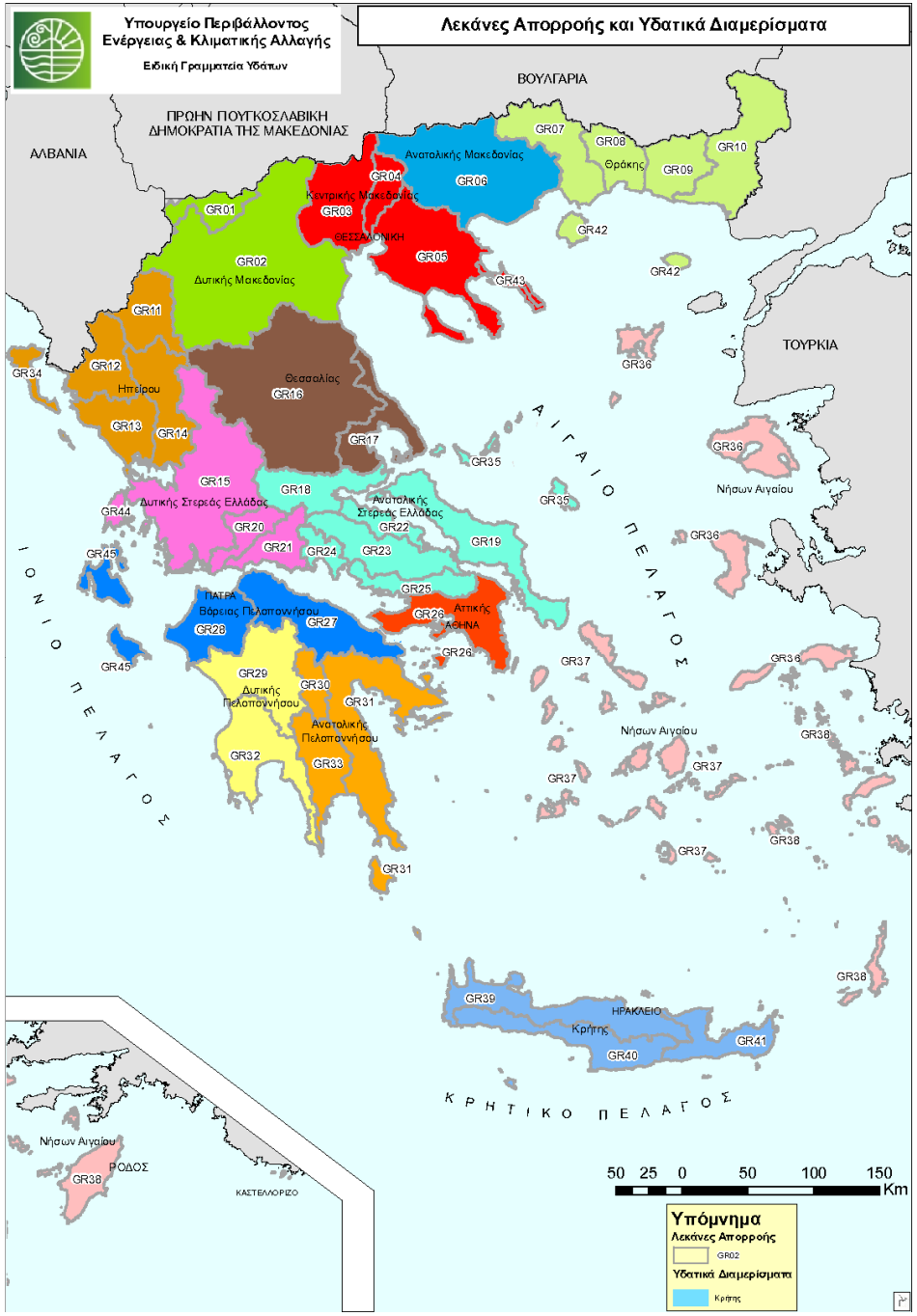
- Unequal distribution of water resources
- Extensive coastline
- Small size river basins
- Overexploitation and salinization of underwater aquifers
- Transboundary dependencies



Country particularities

- Unequal population distribution
- Seasonality of demand
- Large number of areas with water deficiency problems
- Intensive irrigation





River Basin Districts

National Water Council Decision 706/16.07.10
(OJG 383/B'/02.09.2010)

- **45 RIVER BASINS**
- **14 RIVER BASIN DISTRICTS - 5 Transbounday**

Every River Basin District comprises an assemblage of individual River Basins with matching hydrological, hydrogeological conditions

Rational managements of all the surface, underground , coastal and transitional waters, a total of :

- **1500 Water Bodies**

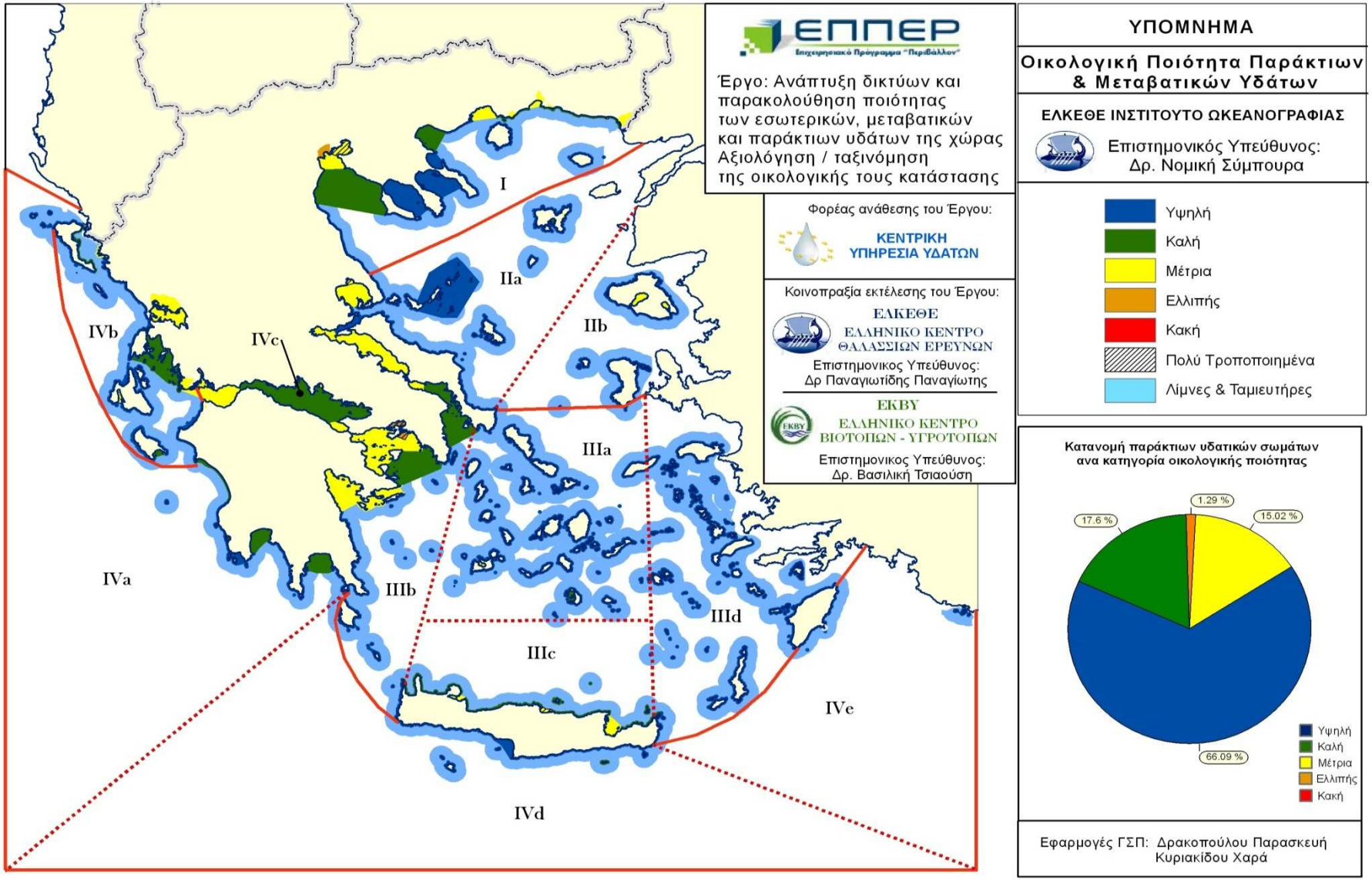
Achieve and maintain good ecological status of the aquatic environment

Management Plans and Programmes of Measures established for each River Basin District at the River Basin level

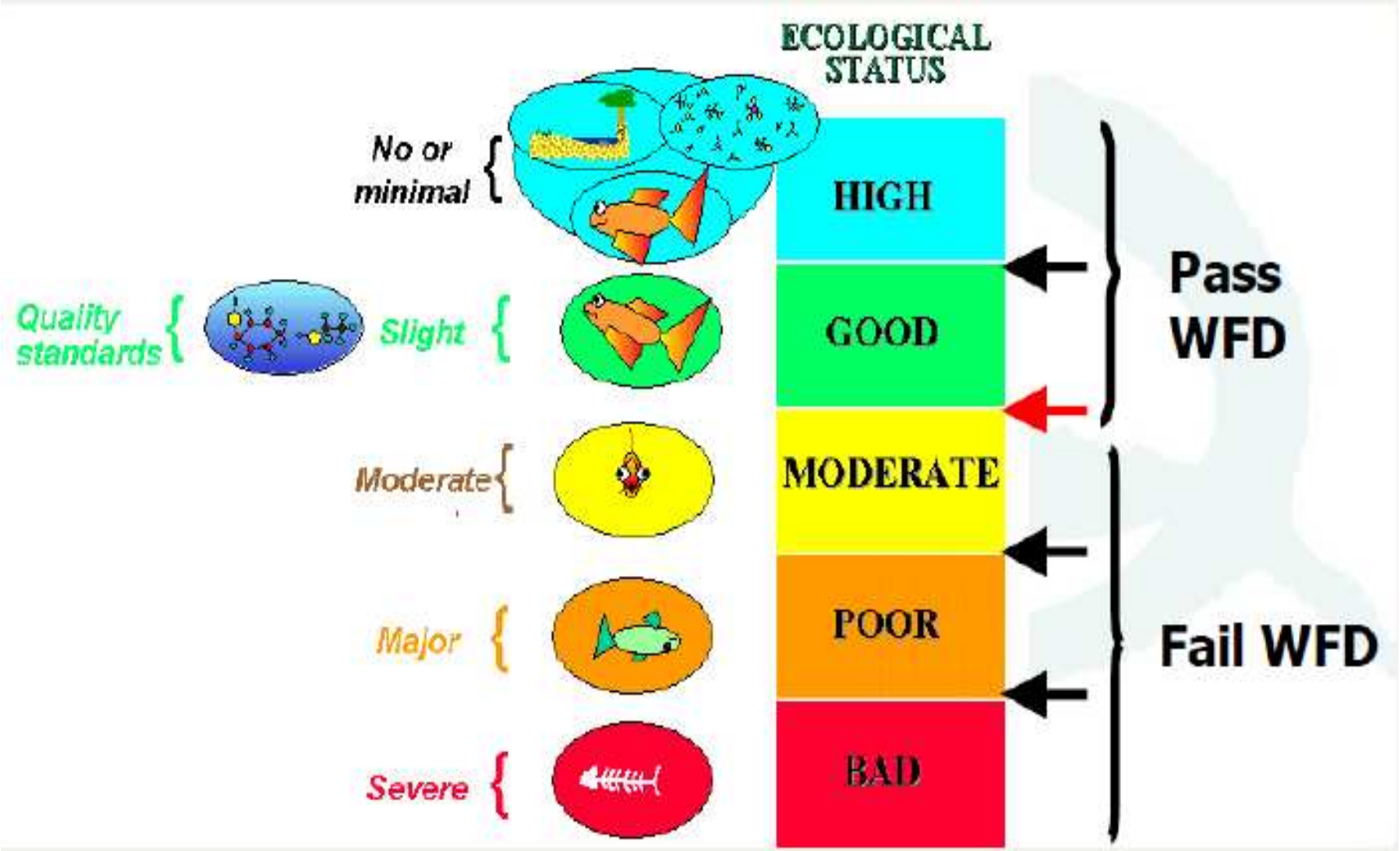
Responsibility of the Ministry of Environment Energy and Climate Change

in cooperation with the Regional Water Directorates of decentralised administration. The competent and co-competent Regions undertake the implementation of measures

Characterization of ecological status



Characterization



National Monitoring Network

Designation of a national monitoring network of water quality and quantity with a definition of sampling positions (stations) and authorities responsible for their operation

OJG 2017B 09.09.2011

The National Monitoring Network comprises of 2000 sampling stations in 1500 water bodies.

4 year budget of 25 million euro

Status of IRBM plan implementation

GREEN - River Basin Management Plans adopted!
YELLOW - consultations finalised, but awaiting adoption.
RED - consultation have not started or ongoing.

** Norway is implementing the Water Framework Directive as part of the European Economic Area Agreement, with specific timetable agreed.*

Marine Environment Urgencies

- Land-based pollution (eutrophication & marine litter)
- Growing levels of shipping (oil spills, emissions of greenhouse gases, alien species, etc.)
- Overfishing (stock collapse, by-catch, proliferation of jellyfish, etc.)
- Dredging (disturbance to the sea floor, release of toxic chemicals, etc.)
- Off-shore energy production (underwater noise, oil or gas leakages, intense shipping traffic, etc.)
- Climate change:
  - ➔ Rising sea levels may wipe out areas of intertidal habitat
  - ➔ Increased sea temperatures may alter the distribution of plankton
  - ➔ Increase in coastal flooding and erosion

Where marine species and habitat types have been assessed, the majority are found to be in unfavourable or unknown condition (EEA, SOER 2010)

The Marine Directive

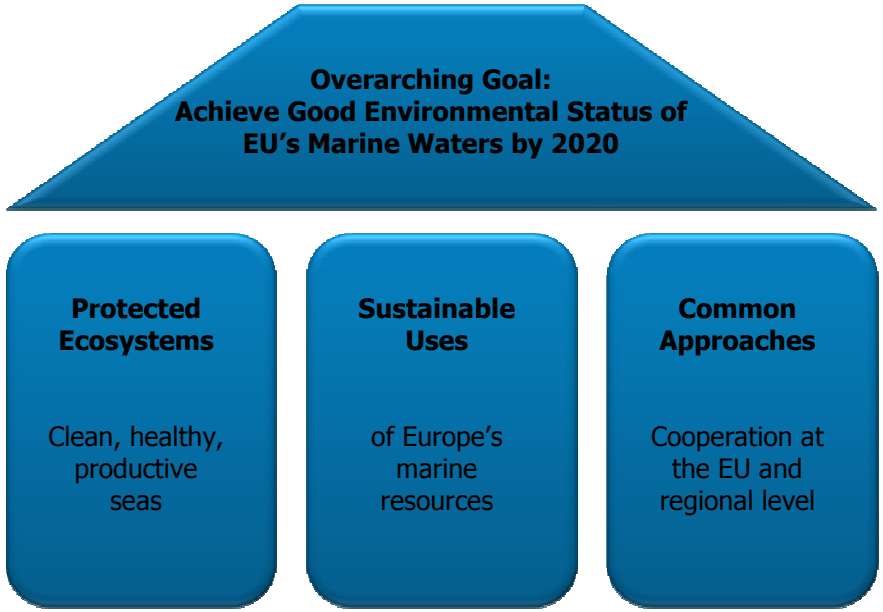
EU's legal instrument for the protection of our seas

Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy

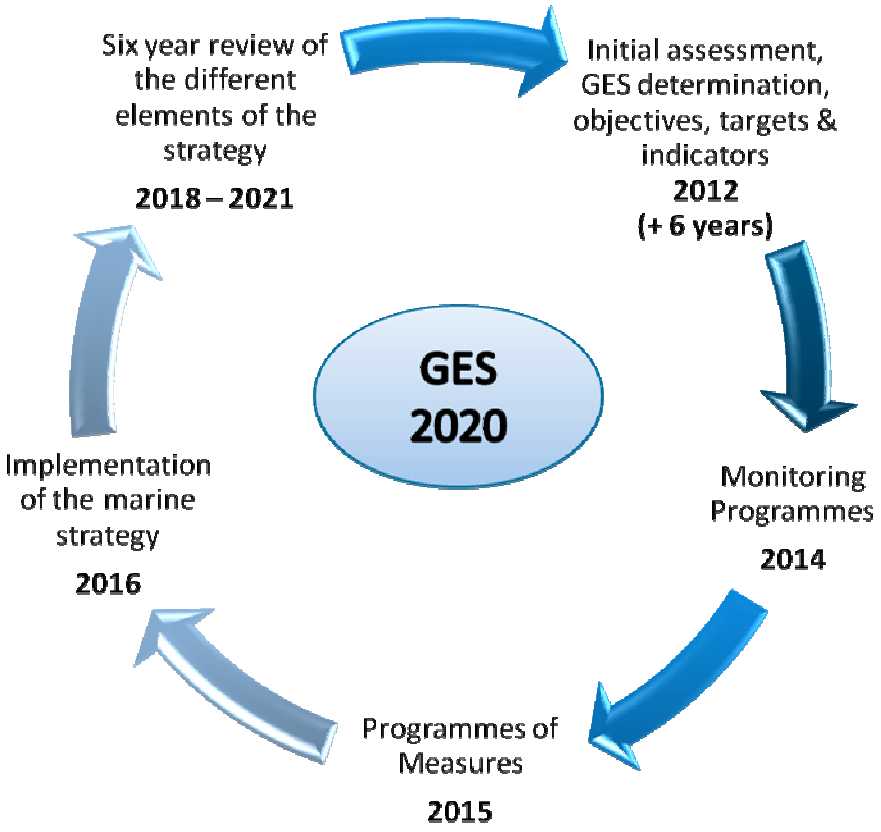
Protected: Overall objective of the Directive to achieve or maintain Good Environmental Status (GES) of the EU's marine waters by 2020.

Sustainable use: Ecosystem-based and integrated approach to the management of all human activities which have an impact on the marine environment.

Common Approach: Regional approach to implementation, and establishment of European Marine Regions



Implementation Steps



Main elements of a Marine Strategy:

- *Initial assessment* of current environmental status of MS waters by 15 July 2012
- *Determination* of GES by 15 July 2012
- Establishment of environmental *targets* and associated *indicators* by 15 July 2012
- Establishment of a *monitoring programme* for ongoing assessment and regular updating of targets by 15 July 2014
- Development of a *programme of measures by 2015,* designed to achieve or maintain GES

Protected Ecosystems

Achieve Good Environmental Status (GES)

Good Environmental Status is "the environmental status of marine waters where these provide **ecologically diverse and dynamic oceans and seas which are clean, healthy and productive**" (MSFD, art. 3(5)).

In addition, GES means that:

- The different uses made of the marine resources are conducted at a *sustainable level*, ensuring their continuity for future generations.
- Ecosystems are *fully functioning and resilient* to human-induced environmental change;
- The marine species and habitats are protected, the decline of biodiversity caused by human activities is prevented and diverse biological components function in balance;
- Human activities introducing substances and energy into the marine environment *do not cause pollution* effects.

11 qualitative descriptors

Descriptors for Good Environmental Status

1. Biodiversity is maintained
2. Non-indigenous species do not adversely alter the ecosystem
3. The population of commercial fish species is healthy
4. Elements of food webs ensure long term abundance and reproduction
5. Eutrophication is minimised
6. The sea floor integrity ensures functioning of the ecosystem
7. Permanent alteration of hydrographical conditions does not adversely affect the ecosystem
8. Concentrations of contaminants give no effects
9. Contaminants in seafood are below safe levels
10. Marine litter does not cause harm
11. Introduction of energy (including underwater noise) does not adversely affect the ecosystem

- **EC Decision on criteria and methodological standards** defines criteria and indicators to help Member States determine what each descriptor means in practice.
- Ex: Descriptor 3 – The population of commercial fish species is healthy – should be assessed using the three following criteria and subsequent indicators:
  - ❖ Criterion 1: the level of pressure of fishing activity
    - ➢ Indicator: fishing mortality
  - ❖ Criterion 2: the reproductive capacity of the stock
    - ➢ Indicator: spawning stock biomass
  - ❖ Criterion 3: the population age and size distribution
    - ➢ Indicator: high proportion of old, large individuals
- In practice: fishing and other human activities affecting populations of commercially exploited fish and shellfish should not push these populations beyond their safe limits.

GES: Common principles, tailored indicators

Illustration with Descriptor 10 on Marine Litter

GES Descriptors
high level, generic across

GES Criteria
will be based on characteristics which define what GES means in each Member State

GES: Indicators & Targets
provide the final level of details. If the targets are met, GES should be achieved

Descriptor 10 – Marine litter does not cause harm to the coastal and marine environment

- Characteristics of litter in the marine and coastal environment
- Impacts of litter on marine life

Indicators:

- Trends in amount of litter washed ashore and/or deposited on coastlines
- Trends in amount of litter in water column and deposited on sea-floor
- Trends in amount, distribution and where possible, composition of micro-particles
- Trends in amount and composition of litter ingested by marine animals

Targets (examples):

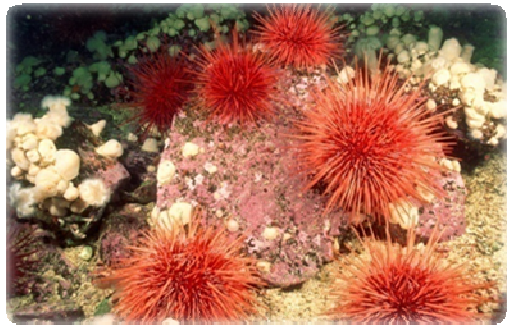
- X% of overall reduction in the volume of litter on coastlines from 2010 levels by 2020.
- Less than 10% of northern fulmars (sea bird) having more than 0.1 g plastic particles in their stomach
- No increase of micro-plastics by 2020

Marine Protected Areas

Marine Protected Areas (MPAs) are areas of our oceans, seas and coasts where species and habitats are protected (through legal or other effective means) from activities that are damaging or that cause disturbance.

The creation of a coherent network of MPAs is in line with:

- ➔ EU conservation legislation (Habitats and Birds Directives)
- ➔ International obligations (Convention on Biological Diversity)



Sustainable Use

Overarching Goal:
Achieve GES by 2020

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Sustainable Use
of Europe's
marine
resources

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Ecosystem-Based & Integrated Approach

Objectives:

- **The collective pressure of human activities is kept within levels compatible with the achievement of GES**
- **The capacity of marine ecosystems to respond to human-induced changes (e.g. climate change) is not compromised**
- **The use of marine goods and services by present and future generations is not compromised**

Requirements:

- **The preservation and enhancement of ecosystems and ecosystem services is systematically taken into account in the development of human socio-economic activities.**
- **The objectives to protect and restore the environment should increasingly set the boundaries for sustainable use of the natural environment**

Central to the Marine Directive

Adaptive Management

Key principles

- **Flexibility and adaptability of the measures to implement the Marine Strategy**
- **Regular update of environmental targets to take into account the changes observed**
- **Integration of the outcomes of future scientific research**

Instruments

- **Monitoring programmes: measure progress towards GES, using targets**
- **Update of Marine Strategy according to the outcomes of the monitoring process**
- **Obligation for Member States to review their marine strategies every 6 years.**
- **Review of:**
  - ➔ **The initial assessment of the state of the marine waters**
  - ➔ **The environmental targets**
  - ➔ **The monitoring programmes**
  - ➔ **The programme of measures**

"Learning-by-doing" approach to deal with the uncertainties linked to the complex functioning of ecosystems & to climate change

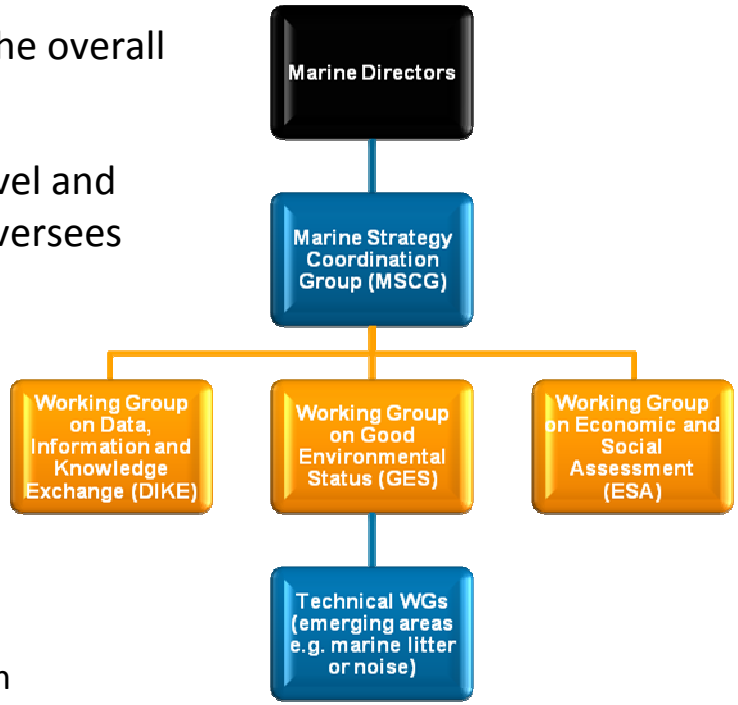
Common Approaches – Consistency and Cohesion of Marine Strategies

Overarching Goal:
Achieve GES by 2020

Common Approaches
Cooperation at the EU and regional level

Common Implementation Strategy

- ***Marine Directors**:* highest level political group focused on the overall implementation of the MSFD
- ***Marine Strategic Coordination Group**:* between the high level and the working groups (WG), prepares material for both and oversees the work of the three WG.
- ***Working Groups* (WG):** provide a platform for discussions between MS to help them with the implementation of the Directive.
  - **WG on Good Environmental Status (GES):** supports MS in their determination of what GES means for their marine waters.
  - **WG on Economic and Social Analysis (ESA):** supports MS with their economic and social analysis of the use of their marine waters
  - **WG on Data, Information and Knowledge Exchange (DIKE):** supports MS with their data reporting obligations



- ***Technical Working Groups**:* two have been set up, covering Noise and Litter, to provide a forum for exchange focusing on emerging areas of particular concern.

Building on existing EU legislation & policies

- **Water Framework Directive**:
  - Objective: achieving 'Good Status' for all EU groundwaters, rivers, lakes, coastal waters, etc. by 2015.
  - 6-year planning cycle, River Basin Management Plans development. First reviewed in 2015.
  - Reduces marine pollution from land-based sources and protects ecosystems in coastal waters

- **Habitats and Birds Directives**:
  - Europe's key laws on nature conservation
  - Provide special protection for key sites (the Natura 2000 network), animal & plants and habitat types
  - Integration of these sites in MPAs network

- **Common Fisheries Policy**:
  - Collaborative way for managing the EU's shared seas and fisheries
  - Objective: Ensuring that Europe's fisheries are sustainable and do not damage the marine environment.
  - Reform from 2011 – integration of issue of environmental impacts of fishing

- Recommendation on **Integrated Coastal Zone Management** (ICZM), and the roadmap on **Maritime Spatial Planning**
  - Define the principles of sound coastal and maritime planning and management. The aim is to
  - Promote rational and sustainable use of the sea , balance different interests

The Regional Sea Conventions

- ***The Barcelona Convention*** *for the Protection of the Marine Environment and the Coastal Region of the Mediterranean:* Mediterranean Action Plan defining key priorities and governance, adopting principles such as the ecosystem approach and tools such as integrated coastal zone management (ICZM).

- ***The Bucharest Convention*** *on the Protection of the Black Sea against Pollution:* Its Strategic Action Plan for Environmental Protection and Sustainable Management of the Black Sea is a pillar of regional cooperation which includes several elements of a marine strategy.

- ***The Helsinki Convention*** *on the Protection of the Marine Environment of the Baltic Sea:* has undertaken considerable public participation and produced a Baltic Sea Action Plan in 2007 in line with MSFD requirements.

- ***The OSPAR Commission*** *for the Protection of the Marine Environment of the North-East Atlantic has established a Regional Implementation Framework for the EU Marine Strategy Framework Directive.*

New legislative framework on marine environmental policy in Greece

Law 3983/2011 (Official Journal of the Government - OJG 144/A/17-6-2011) on the protection and management of the marine environment – harmonisation with Directive 2008/56 of 17 June 2008

Subject of Law 3983/2011

Law 3983/2011 establishes a framework for taking the necessary measures to achieve or maintain good environmental status in the marine environment of Greece by the year 2020 at the latest.

Subject of Law 3983/2011

Development and implementation of marine strategies in order to:

(a) protect and preserve the marine environment, prevent its deterioration or, where practicable, restore marine ecosystems in areas where they have been adversely affected;

(b) prevent and reduce inputs in the marine environment, with a view to phasing out pollution, so as to ensure that there are no significant impacts on or risks to marine biodiversity, marine ecosystems, human health or legitimate uses of the sea.

Subject of Law 3983/2011

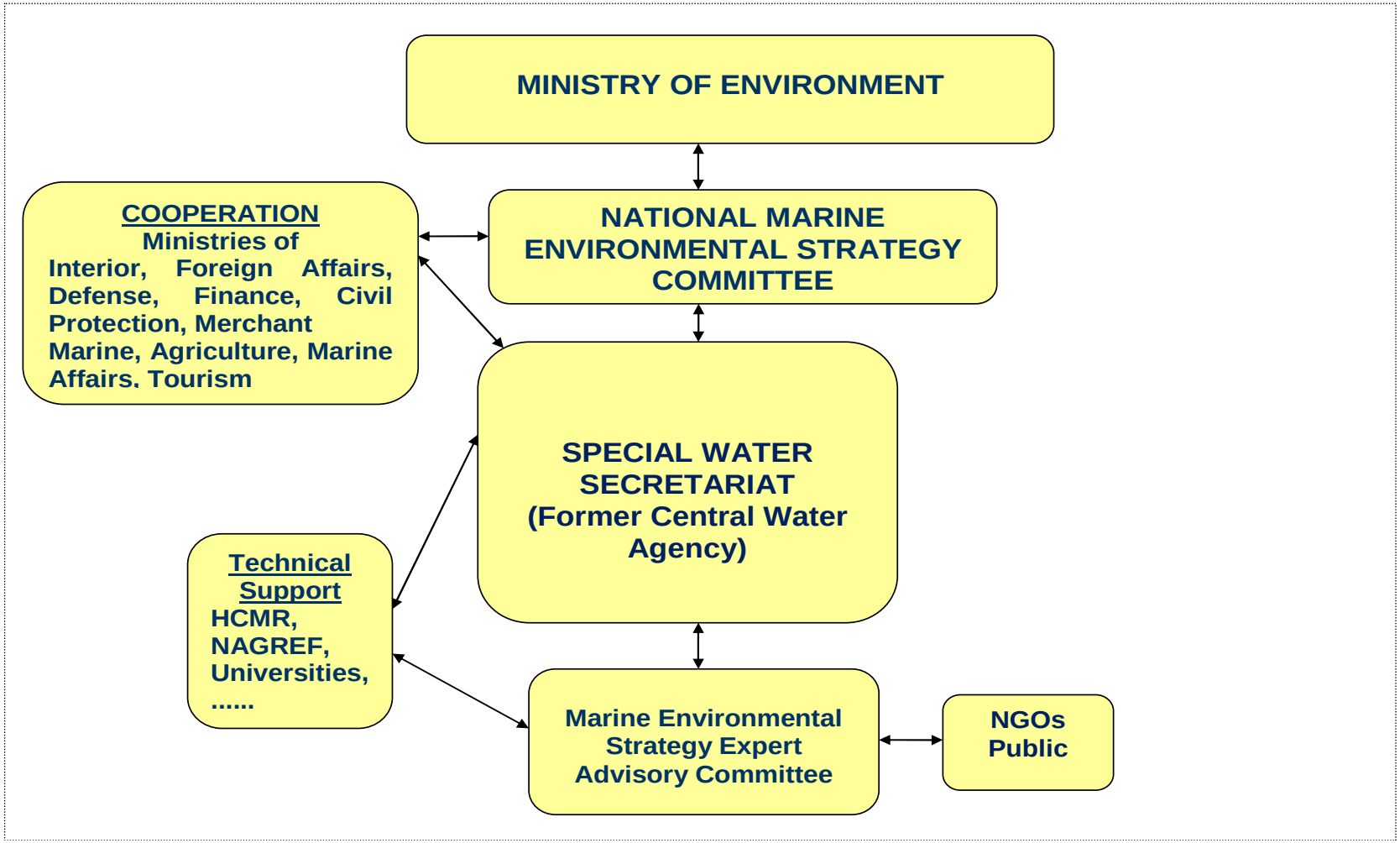
National marine strategies shall apply an ecosystem-based approach to the management of human activities in Greece:

- The collective pressure of human activities is kept within levels compatible with the achievement of GES
- The capacity of marine ecosystems to respond to human-induced changes (e.g. climate change) is not compromised
- The use of marine goods and services by present and future generations is not compromised

Subject of Law 3983/2011

Contributes to coherence between, and aims to ensure the integration of environmental concerns into, the different policies, agreements and legislative measures which have an impact on the marine environment in Greece.

Institutional Framework



A Sea for Life

The Marine Strategy Framework Directive

http://ec.europa.eu/environment/water/marine/directive_en.htm

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