

Technical Workshop on Selecting Indicators for
the State of Regional Seas
Geneva, 30 June – 2 July 2014

EEA coastal and marine indicators – state of play

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European Environment Agency



EEA mission

(simplified)

The European Environment Agency is the EU body dedicated to providing sound, independent information on the environment

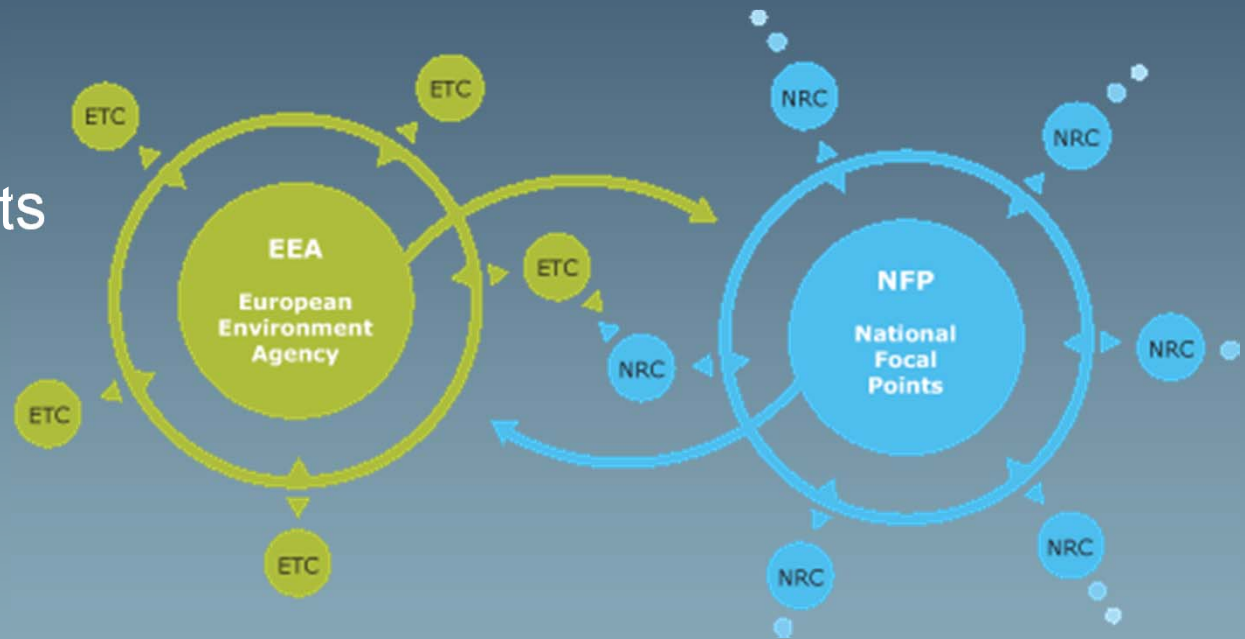


We are a main information source for those involved in developing, adopting, implementing and evaluating environmental policy, and also the general public

European environment information and observation network (Eionet)

About 350 national institutions

- National focal points
- European topic centres
- National reference centres
- Other institutions



Which are the countries with which EEA collaborates?



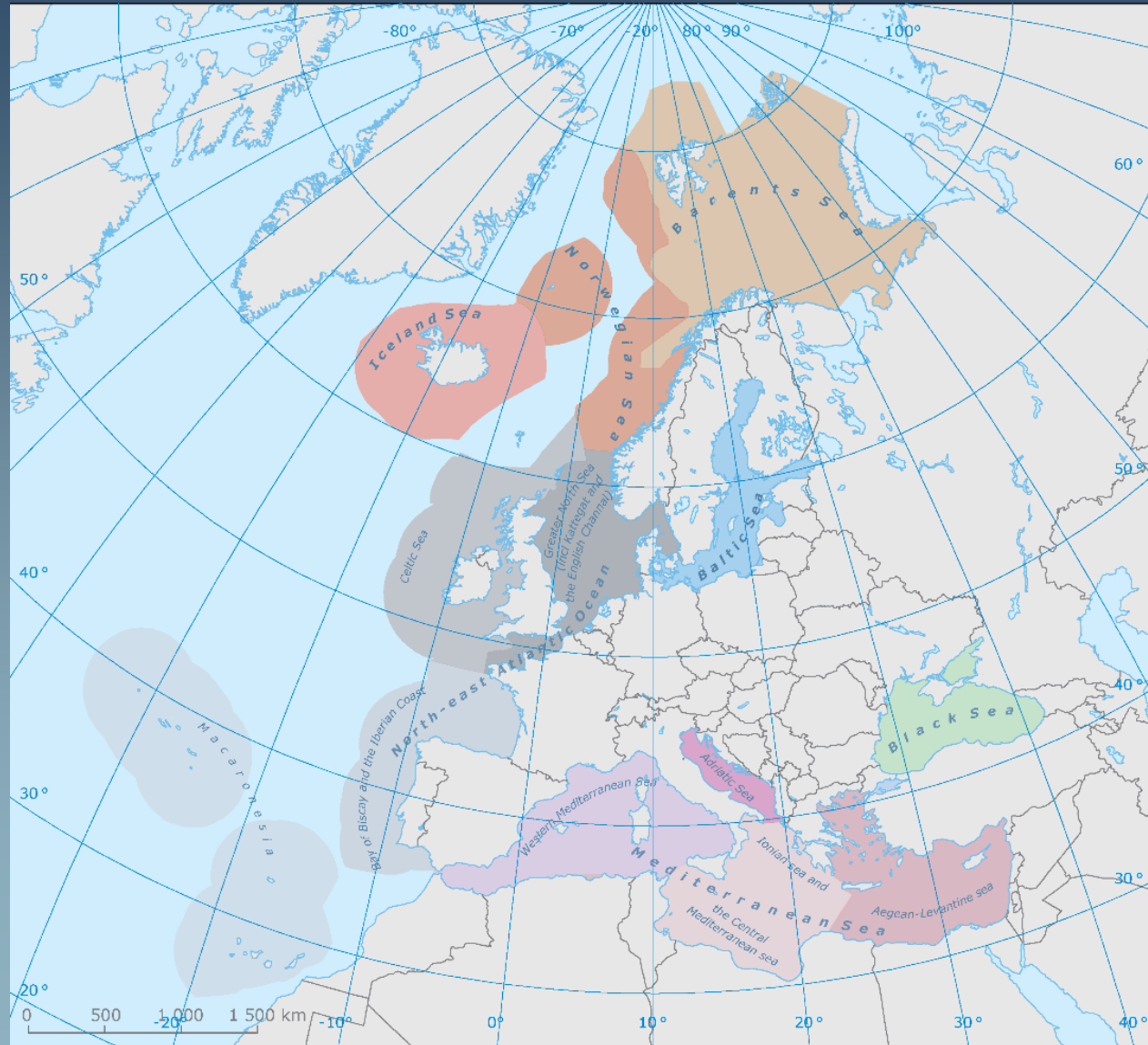
EEA and ENPI-SEIS project coverage

- EEA member countries
- EEA cooperating countries
- ENP East
- Strategic partnership
- ENP South

The map does not imply any opinion from EEA concerning the legal status of any country or territory, its area of authority or the delineation of its frontiers and boundaries.

* Syria: Collaboration is temporarily suspended

Regional seas surrounding Europe



EEA indicators - specification

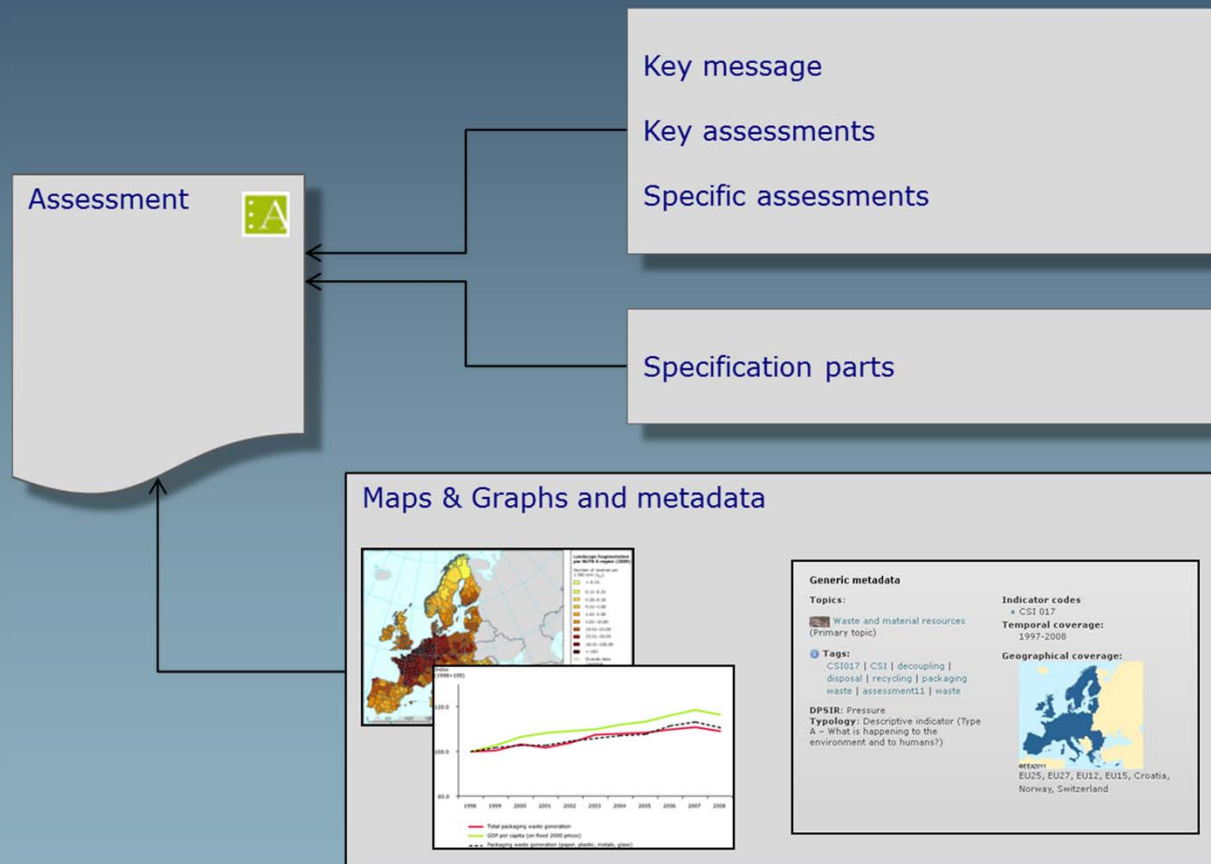
EEA indicator specification template



- Title
- Add assessments
- Justification for indicator selection
- Scientific references
- Indicator definition
- Policy Questions
- Policy Context and targets
- Related policy documents
- Methodology for indicator calculation
- Methodology for gap filling
- Methodology references
- Data specifications
- Uncertainties
- Related items
- General metadata

EEA indicators - assessment

EEA indicator assessment template



EEA coastal and marine indicators - current

Based on EEA dataset

- Nutrients in transitional, coastal and marine (TCM) waters
- Chlorophyll-a in TCM waters
- Hazardous substances in marine organisms

Based on external datasets

- Status of European fish stocks
- European fishing fleet capacity
- European aquaculture production

EEA coastal and marine indicators – new (2014)

Based on external datasets

- Trends in marine non-indigenous species
- Trends in pathways for introduction of marine non-indigenous species

EEA current “environmental” indicators

CSI021 - Nutrients in transitional, coastal and marine waters

<http://www.eea.europa.eu/data-and-maps/indicators/nutrients-in-transitional-coastal-and/nutrients-in-transitional-coastal-and-4>

CSI023 – Chlorophyll in transitional, coastal and marine waters

<http://www.eea.europa.eu/data-and-maps/indicators/chlorophyll-in-transitional-coastal-and/chlorophyll-in-transitional-coastal-and-3>

MAR001 – Hazardous substances in marine organisms

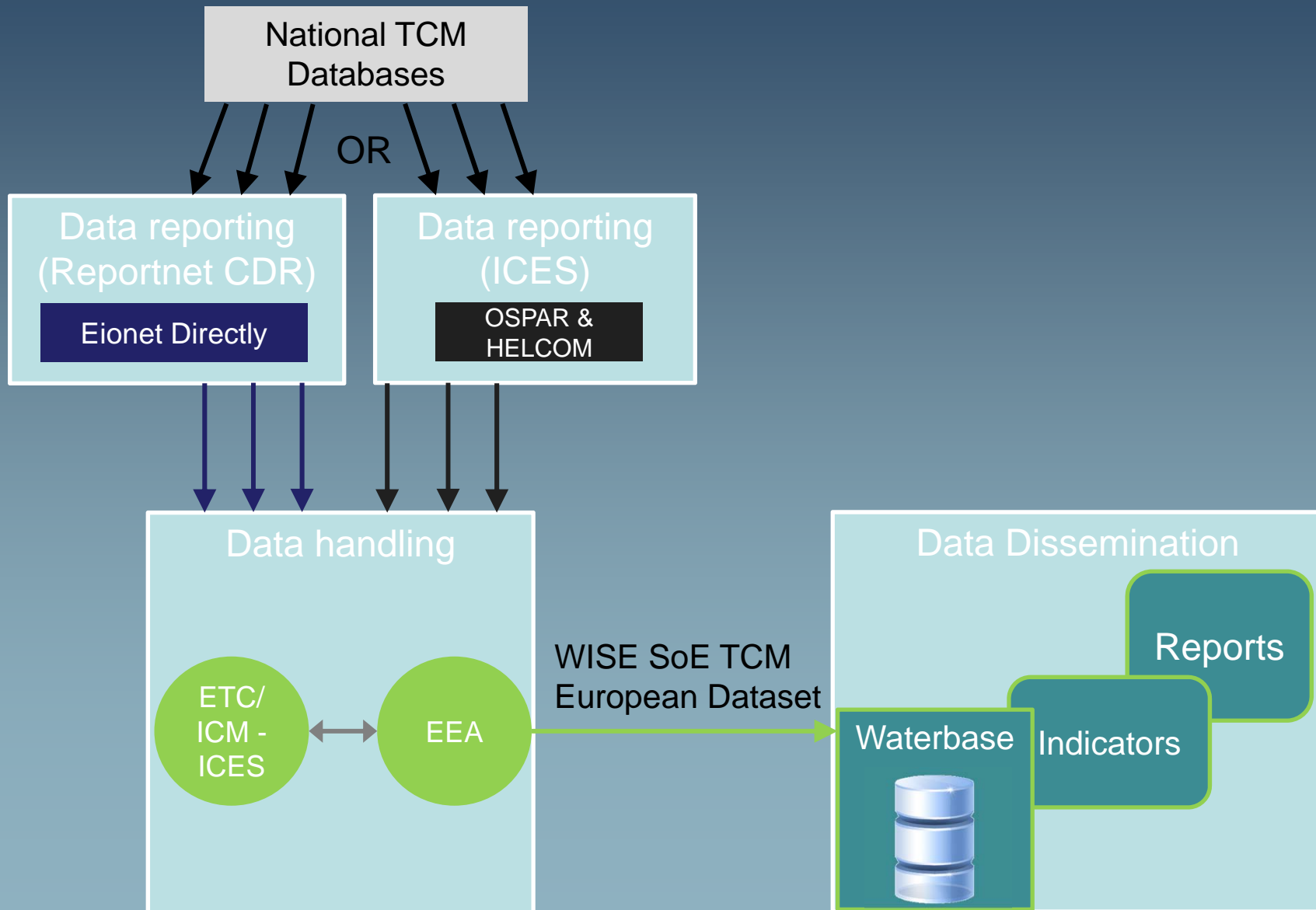
<http://www.eea.europa.eu/data-and-maps/indicators/hazardous-substances-in-marine-organisms/hazardous-substances-in-marine-organisms-3>

CSI032 – Status of marine fish stocks

<http://www.eea.europa.eu/data-and-maps/indicators/hazardous-substances-in-marine-organisms/hazardous-substances-in-marine-organisms-3>

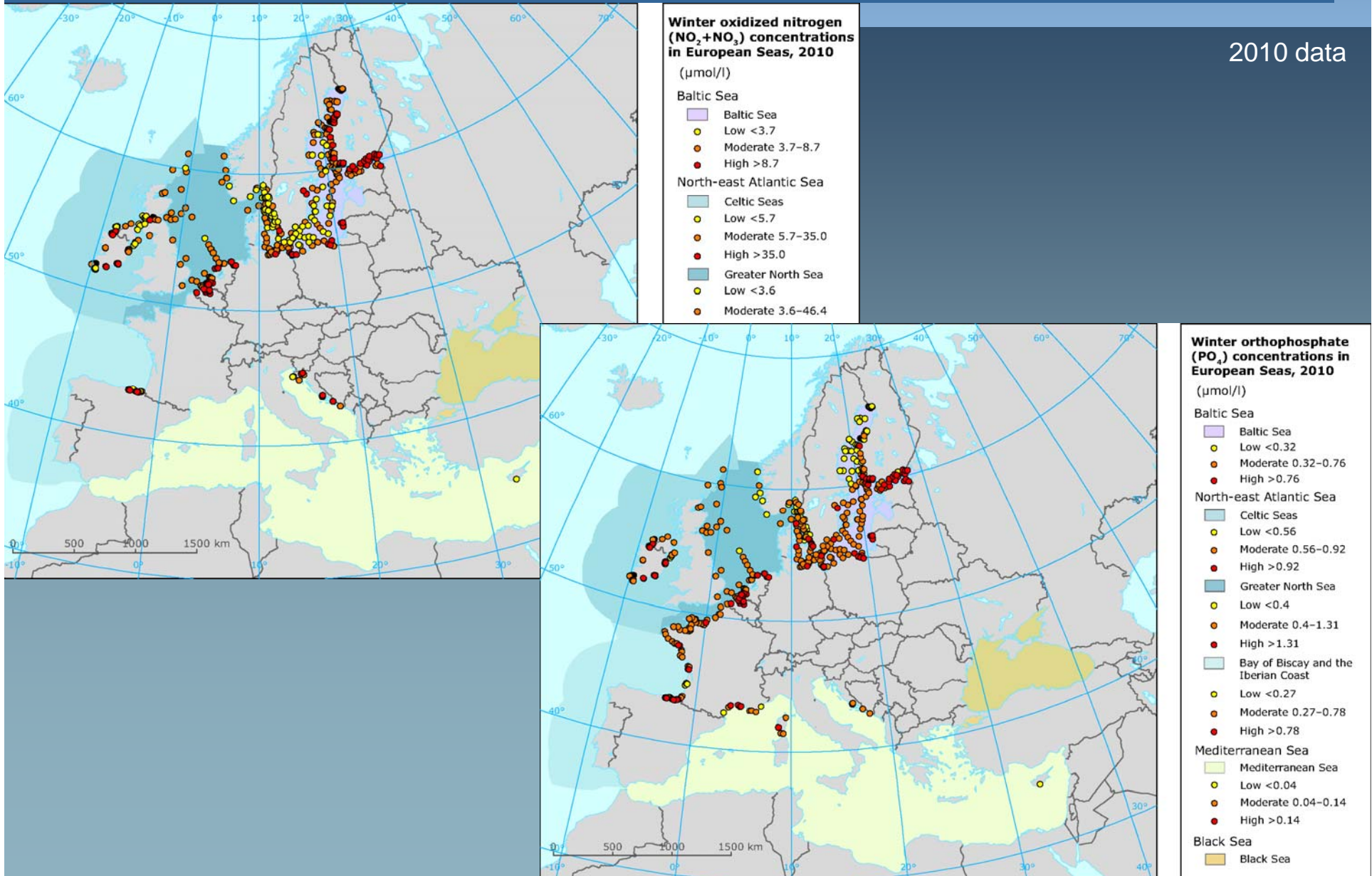
All these indicators will be updated in Autumn 2014

Eionet reporting process of TCM data and data use



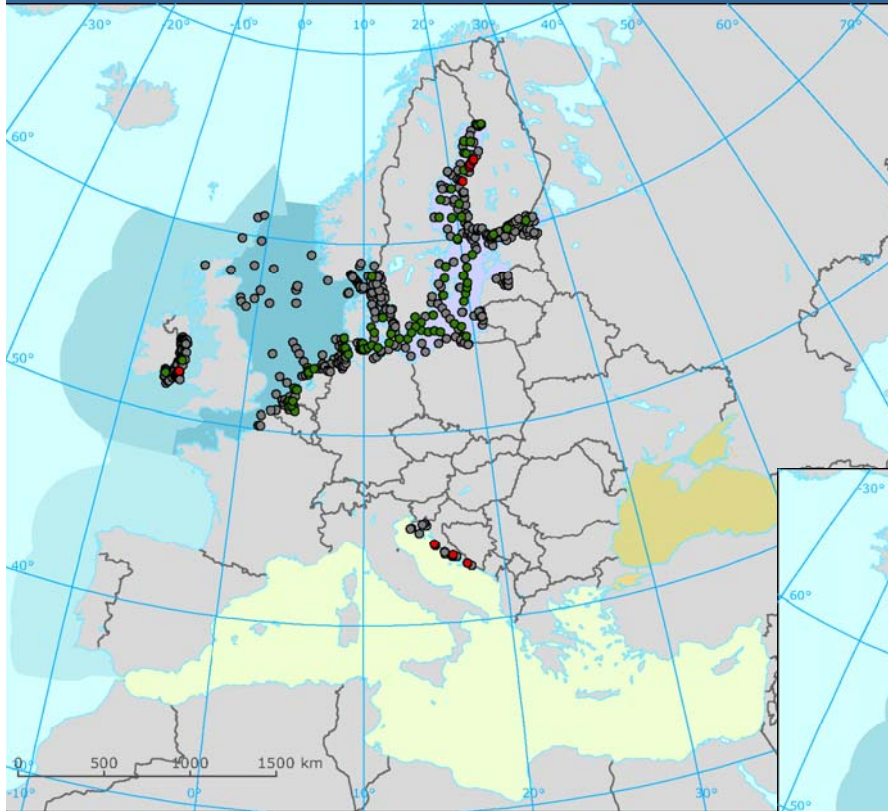
CSI 021 (nutrient levels) - 2011

2010 data



CSI 021 (nutrients trends) - 2011

2010 data



Observed changes in winter oxidised nitrogen ($\text{NO}_2 + \text{NO}_3$) concentrations, 1985–2010

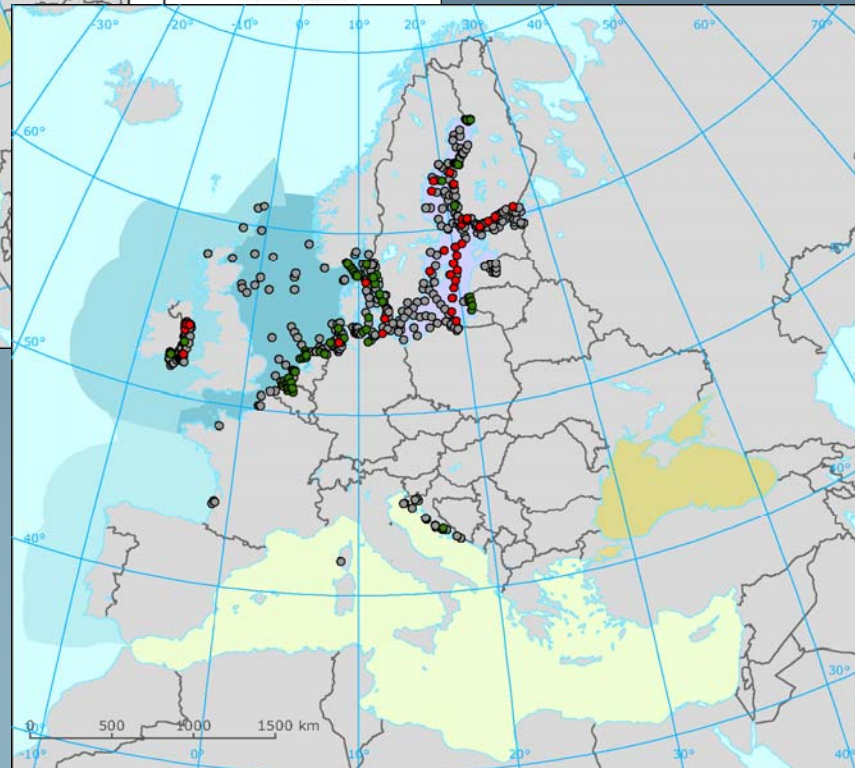
- Decrease
- Increase
- None

Baltic Sea

- Baltic Sea

North-east Atlantic Sea

- Celtic Seas
- Greater North Sea (incl. Kattegat and the English Channel)
- Bay of Biscay and the Iberian Coast



Observed changes in winter orthophosphate (PO_4) concentrations, 1985–2010

- Decrease
- Increase
- None

Baltic Sea

- Baltic Sea

North-east Atlantic Sea

- Celtic Seas
- Greater North Sea (incl. Kattegat and the English Channel)
- Bay of Biscay and the Iberian Coast

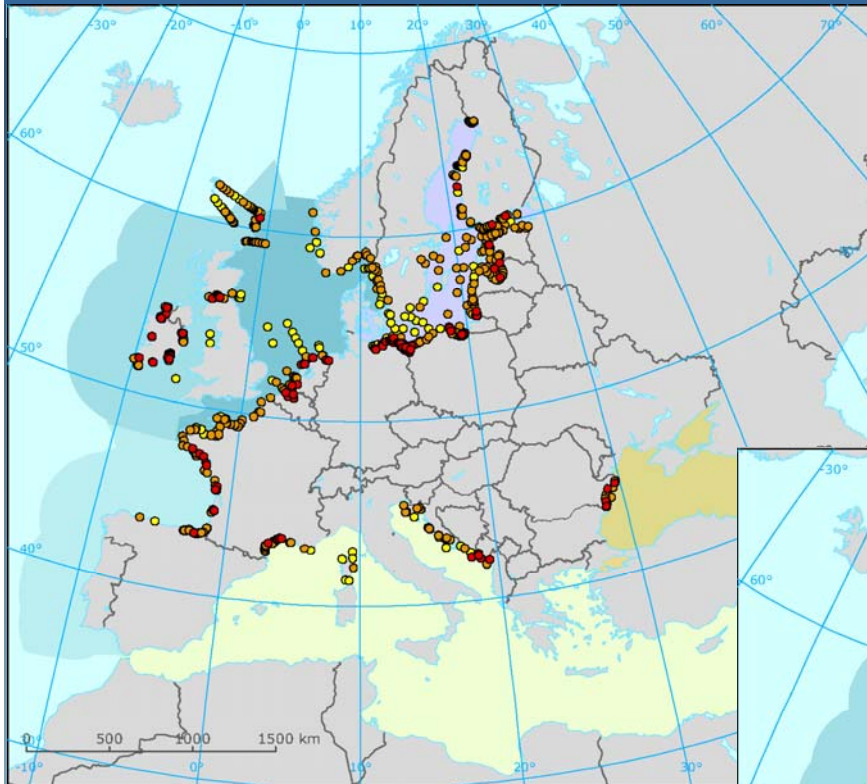
Mediterranean Sea

- Mediterranean Sea

Black Sea

- Black Sea

CSI023 (chla levels and trends) - 2011



Summer chlorophyll-a (Chla) concentrations in European Seas, 2010
($\mu\text{g/l}$)

Baltic Sea

- Baltic Sea
- Low <2.8
- Moderate 2.8-12.2
- High >12.2

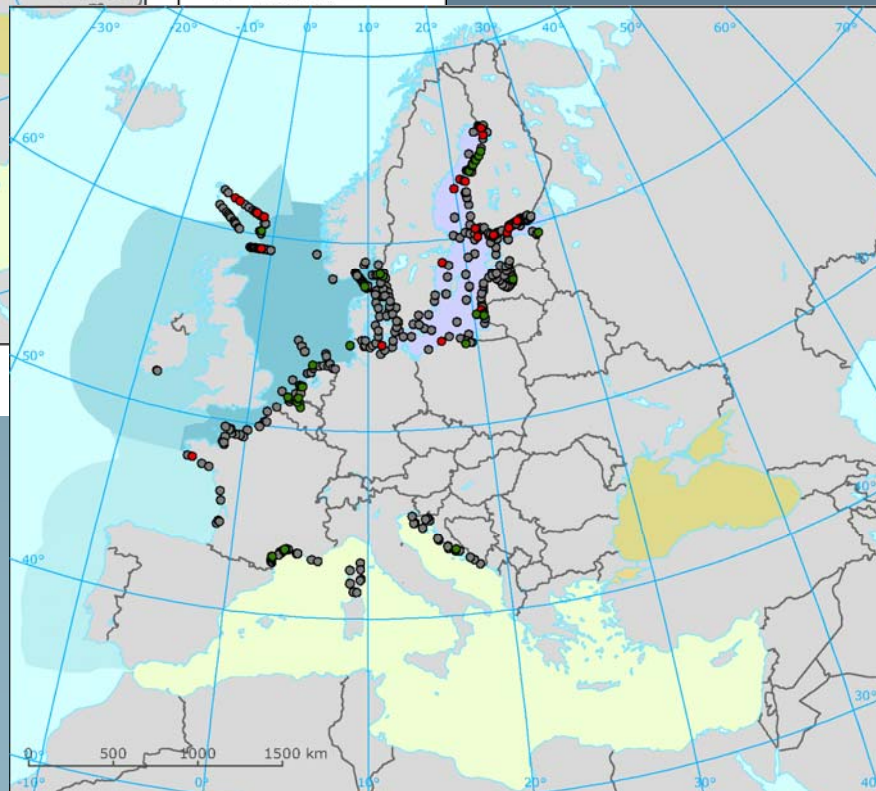
North-east Atlantic Sea

- Celtic Seas
- Low <2.0
- Moderate 2.0-6.5
- High >6.5

Greater North Sea

- Greater North Sea
- Low <1.1
- Moderate 1.1-8.9

2010 data



Observed changes in chlorophyll-a (Chla) concentrations, 1985-2010

- Decrease
- Increase
- None

Baltic Sea

- Baltic Sea

North-east Atlantic Sea

- Celtic Seas
- Greater North Sea (incl. Kattegat and the English Channel)
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Mediterranean Sea

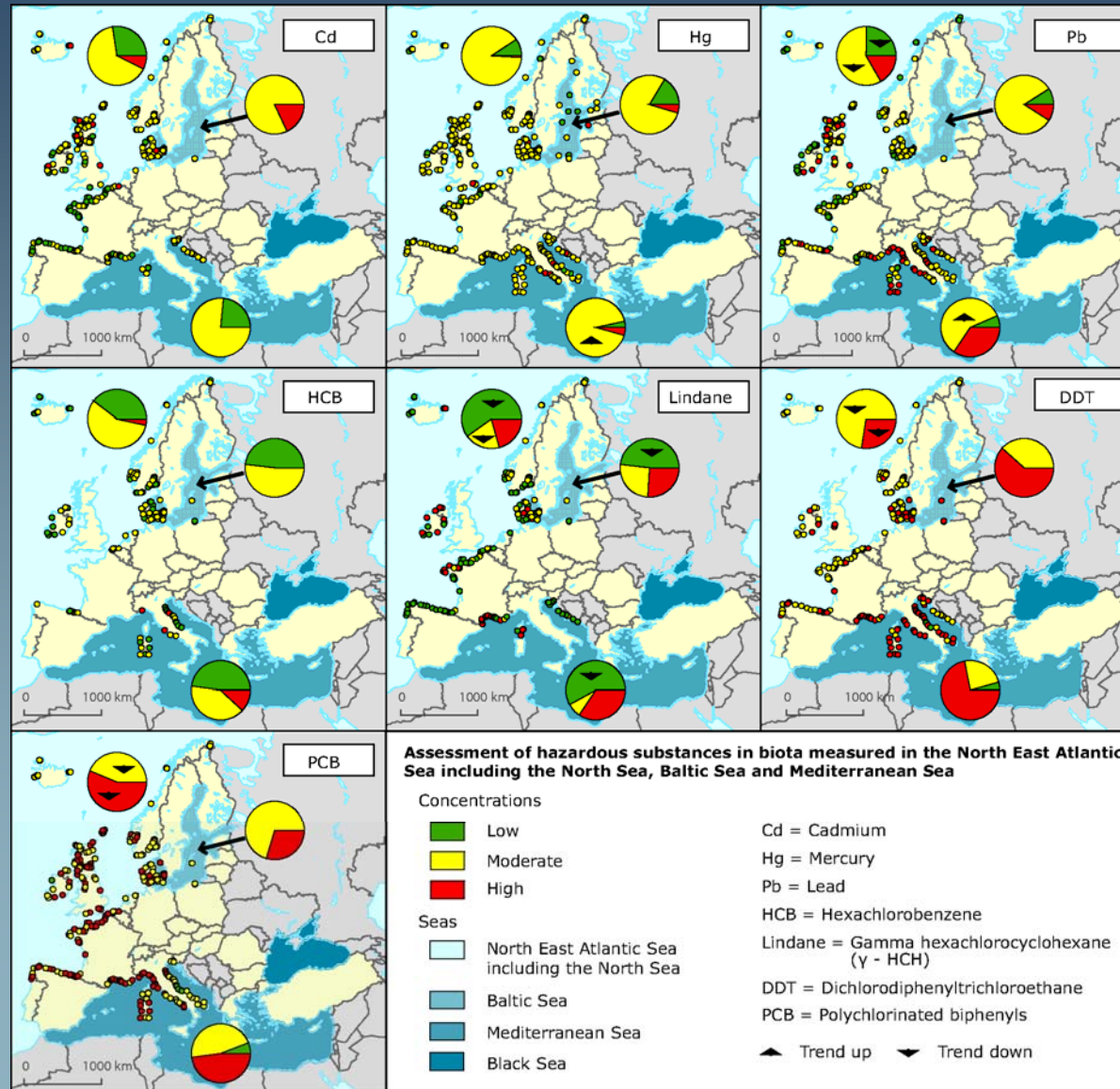
- Mediterranean Sea

Black Sea

- Black Sea

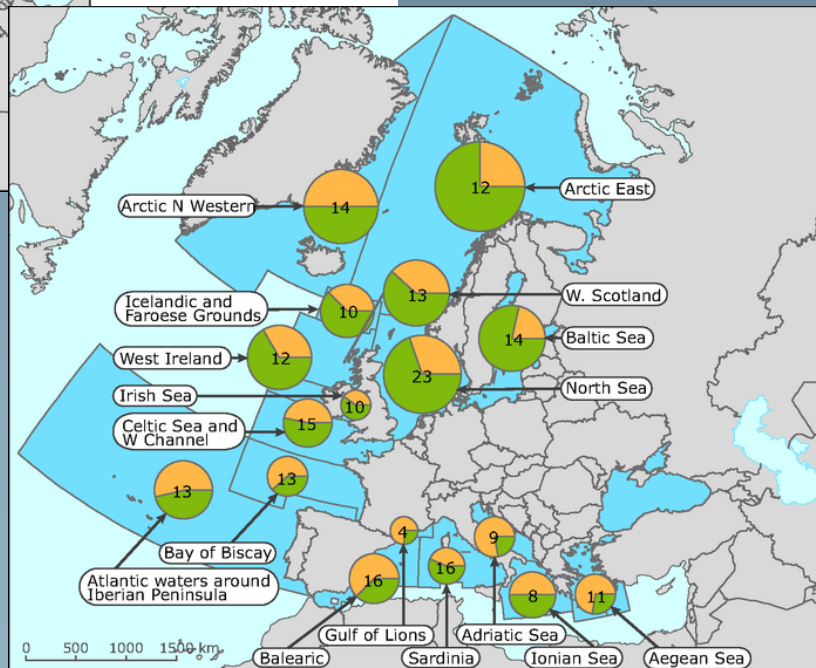
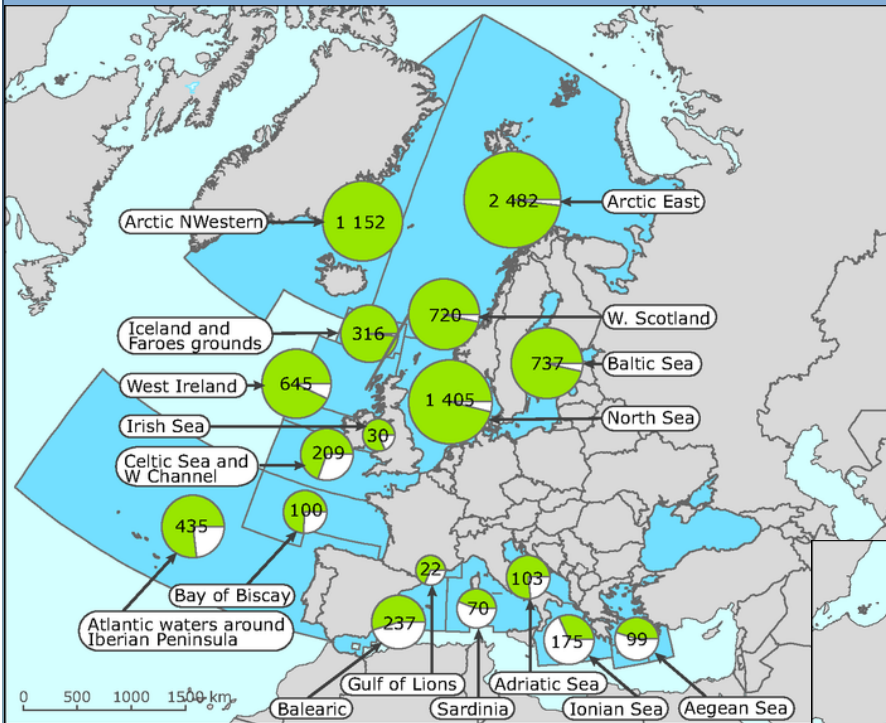
MAR001 (Hazardous Subs. in Biota) - 2011

2010 data



CSI032 (Status of fish stocks) - 2011

2008 data





Horizon 2020 initiative Context



3rd Euro-Mediterranean Ministerial Conference on environment in Cairo in 2006:

*“...endorsed the timetable for the Horizon 2020 initiative for **de-pollution of the Mediterranean Sea by 2020** and agreed to undertake steps to develop **national integrated environmental information systems** to produce reliable, comparable and timely statistical data and information to support Horizon 2020 aims”.*

H2020 phase I (2006-13) road-map calls for the monitoring of the initiative:

- **five-yearly reports** on the state of the environment in the Mediterranean Sea based on an agreed set of indicators
- **biennial synthesis** progress reports focusing on country assessments

Athens declaration (May 2014) confirmed this mandate

Detailed workplan (2014-20) to be adopted by end of the year



Pillars of SEIS - Shared Environmental Information System

- Ministry of Environment
- Statistics department
- National thematic network

1. Municipal waste
2. Urban Wastewater
3. Industrial emissions



- Establishment of long term reporting mechanisms
 - National and regional environmental information systems

Horizon 2020 Key indicators

Waste

- Municipal waste generation, composition
- Volume of municipal waste collected and treated, number, type and location of landfills

Waste water

- Share of population with access to an improved sanitation system (total, urban, rural)
- Volume of wastewater collected, of which volume of wastewater treated, type of treatment)

Industrial emissions

- Nutrient concentrations in transitional, coastal and marine waters
- Release of toxic substances and nutrients from industrial sectors



Thank you for your attention

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Mediterranean area cooperation

Partnerships and Networks

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European Environment Agency

