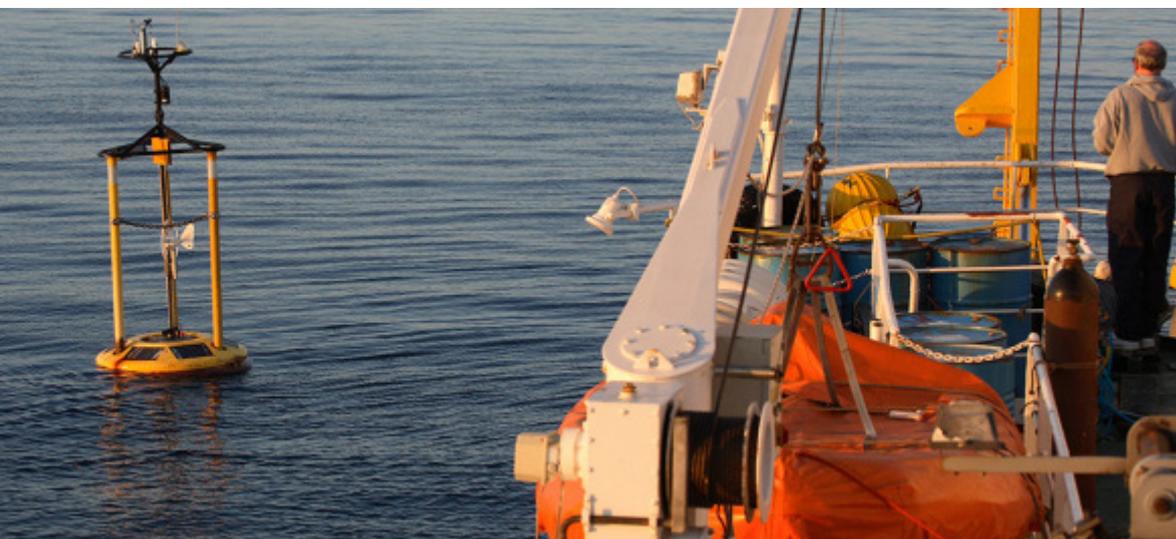


# New Knowledge Pilot Projects

Baltic Sea • Black Sea • Celtic Sea  
Mediterranean Sea • North Sea



Co-financed by  
DG Environment





## Towards coordinated marine monitoring in the European Seas

# Main findings

The three New Knowledge pilot projects (2013-2015) catalogued information on current marine environmental monitoring in the five European sea regions. The projects also proposed solutions for better integrated monitoring programmes, to be taken forward in Regional Sea Conventions and in EU Member States, where a key focus was on the requirements of the EU Marine Strategy Framework Directive (MSFD) and related obligations and collaborated closely with the Regional Sea Conventions. Metadatabases were prepared, which summarize information on current marine monitoring programs in the different sea regions. These metadatabases are available online, helping to increase cross-boundary collaboration in joint monitoring programmes and to evaluate whether monitoring is sufficient when measuring progress towards Good Environmental Status (GES).

The projects also developed tools for coordinated monitoring, e.g. GIS tools, web-based platforms, statistical techniques for joint planning, proposals for monitoring guidelines and a checklist for joint monitoring.

Inter-regional cooperation has been another important aspect, as synergies and similarities have actively been sought between the sea regions.

It was found that the current level of monitoring varies greatly between regions and topics. For example, in the Baltic, there is a long tradition of coordinated environmental monitoring under HELCOM for e.g. hydrography, nutrients and hazardous substances, but for certain issues such as seabirds and marine litter, coordinated monitoring is still missing. In the North Sea and Celtic Sea the situation is comparable. Coordination is also more focused on sampling and analytical guidelines, joint reporting and assessments, and less on operational collaboration. In the Mediterranean and in the Black Sea, though efforts on coordinated monitoring exist, mammals, birds, reptiles, commercial fish and shellfish, contaminants in biota and in seafood are rarely monitored according to MSFD requirements. In the Mediterranean, Black Sea and North Sea/ Celtic Sea litter monitoring started recently and noise monitoring is still in its preparatory phase. Offshore sea areas are poorly sampled.

## Baltic Sea • BALSAM

BALSAM, coordinated by the Secretariat of HELCOM (Baltic Marine Environment Protection Commission), collected information on current Baltic monitoring programmes and activities included in the extensive HELCOM Monitoring Manual published in October 2014. With its 18 partner institutions from the Member States surrounding the Baltic Sea, the project also studied and made guidelines on how coordinated monitoring could be enhanced for seals, seabirds, non-indigenous species and benthic habitats. The project investigated how research vessels can be used in a more harmonized and

cost-effective way, e.g. through online information exchange on such vessels and their planned cruises. Moreover, BALSAM recommends that the data management and infrastructure can be improved in the Baltic through databases and an action plan, also with the view to support HELCOM core indicators and upcoming assessments on Good Environmental Status (GES).

BALSAM activities were tightly linked to the work of HELCOM and its groups, in order to ensure that the results are policy-relevant and in line with the needs identified by HELCOM countries.

## Mediterranean & Black Sea • IRIS-SES

IRIS-SES, coordinated by Hellenic Center for Marine Research (HCMR) with 9 partner institutions based in 7 EU Member States and 1 EU candidate country, envisaged to develop a new concept and decision-making tools for joint monitoring towards GES in the Mediterranean and the Black Sea with a view to also support UNEP/MAP and BSC.

The project commenced with a collection of monitoring programs running in both basins; created an open access inventory of them and incorporated an initial analysis of pressures and an assessment of international and regional legislation. The information from the monitoring

inventory has been used for creating raster maps of most MSFD descriptors and thus to identify monitoring gaps. This work together with the tools produced within IRIS-SES – a GIS tool for eutrophication, contaminants and fisheries unified for Mediterranean and Black Sea and a decision making tool (DeCyDe-4-IRIS) – aim to support the stakeholders and decision makers for effective monitoring plans locally and regionally, and to implement any abatement measures. Finally, IRIS-SES worked towards a cost-effective proposal for joint monitoring system using the requirements from existing projects, policies and other initiatives.

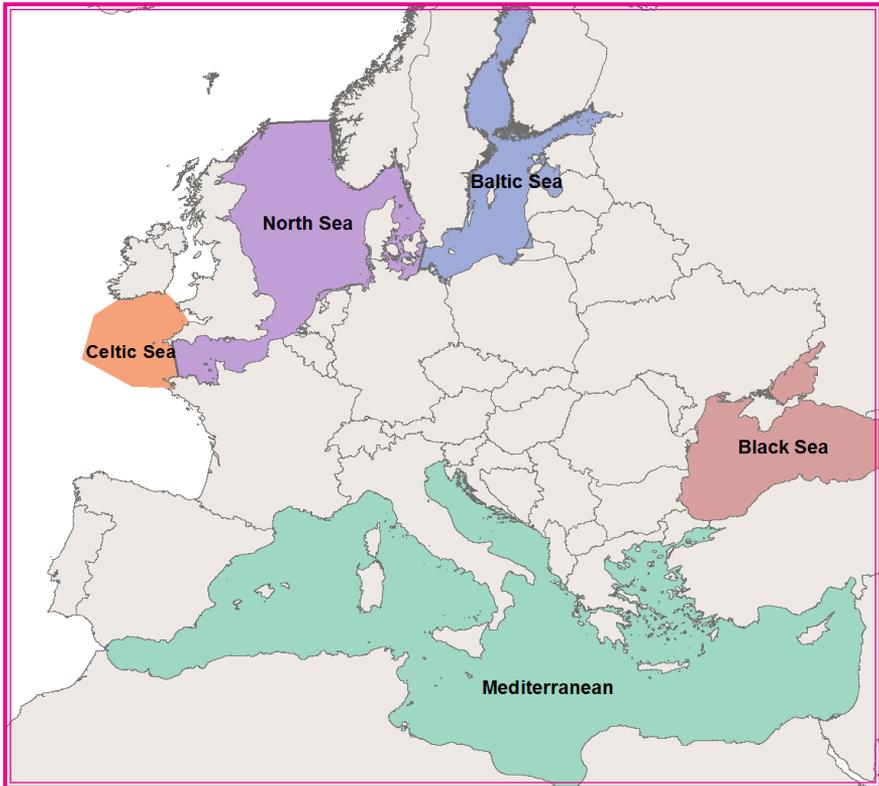
## North Sea & Celtic Sea • JMP NS/CS

JMP NS/CS was coordinated by the Ministry of Infrastructure and the Environment of Netherlands (Rijkswaterstaat), in collaboration with 17 partner institutions in all countries bordering the North Sea and the Celtic Sea.

The project delivered a searchable metadata-base, building on reporting formats for the EU Marine Framework Strategy Directive (MSFD), which may be further used in the OSPAR data and information management system. Operational steps towards multiple use of monitoring platforms were identified, for instance, on how to use fish surveys for monitoring of other MSFD

parameters. Monitoring and assessment at ecologically relevant spatial scales, especially in offshore areas, require strengthened international collaboration, comparable to current fisheries monitoring. Joint assessment areas together with optimization of spatial sampling design, increase the statistical power of collected data with the same – or less – monitoring effort.

Tools and approaches were tested with three OSPAR common indicators, resulting in concrete proposals for joint monitoring. The project furthermore developed a general guidance on how to move towards joint monitoring.



The projects partners are based in different sea regions and include institutions from EU Member States.

# Full results

Available soon in project websites

BALSAM - Baltic Sea Pilot Project: Testing new concepts for integrated environmental monitoring of the Baltic Sea

[helcom.fi](http://helcom.fi)



IRIS-SES - Integrated Regional Monitoring Implementation Strategy in the South European Seas

[iris-ses.eu](http://iris-ses.eu)



JMP NS/CS - Joint Monitoring Programme North Sea and Celtic Sea  
[informatiehuismarien.nl/projecten/joint-monitoring-programme/](http://informatiehuismarien.nl/projecten/joint-monitoring-programme/)

