

Joint Action

Intercalibration for EU Water Framework Directive

Action Description

Lead Country: Belgium

Project period: July, 2014 - September 2017

About

The JPI Oceans pilot action Joint funding of the Scientific Intercalibration exercise for the EU Water Framework Directive (WFD) coastal and transitional waters in the North-East Atlantic brings together scientific experts to perform required analyses in the most cost-efficient way.

The JPI Oceans action adds value by:

- finding experienced scientific expert leads to perform required analyses in the most cost-efficient way for phytoplankton and benthic invertebrate fauna (as there are constraints in the availability of experts of national environmental authorities);
- reducing fragmentation (of comparison calculation efforts) and increase efficiency in relation to the Water (and Marine Strategy) Framework Directive;
- increasing experience with joint data collection and analysis of eleven member countries;
- testing a mechanism for joint funding from environmental authorities of nine member countries, surpassing the traditional model of joint calls, to obtain the performance improvements.

Ten environmental authorities of nine countries (BE, DE, DK, FR, IE, NL, NO, SE, UK) have signed a Memorandum of Understanding and committed budgets to the pilot action. The Portuguese environmental authority contributed in-kind with two expert leads from Portuguese universities.

In doing so, the JPI Oceans pilot action enables a long-term dialogue between environmental authorities and the scientific community of member countries to solve remaining scientific challenges jointly.

Results

A real common pot was created and governed by a research funding body that contracted the different expert leads after a specifically designed questionnaire selection process.

All of the scientific intercalibration exercises are having an impact on the thresholds for environmental quality that they are legally bound to reach. Changes to the thresholds were needed for seven out of eleven participating countries (+ for several cases). The in-depth scientific analyses showed that countries were mostly wrong about their initial assessments about comparability or incomparability between each-other. Even where countries were previously considered to be consistent with each-other, some scientific analysis showed that this was not entirely the case, because of biogeographical differences not taken into account correctly before. These analyses which adopted a consistent procedure for all, made it easier to demonstrate the scientific basis of the assessments, thus allowing better setting of thresholds.

Background

The EU Water Framework Directive (WFD) was adopted in 2000, the purpose being establishment of a framework for protection of inland surface waters, transitional (estuarine) waters, coastal waters and groundwater. The overall aim for these surface and groundwater 'water bodies' was to achieve good chemical and ecological status by 2015.

The essence of intercalibration is to ensure that the definition

of ecological status in member countries' assessment methods for biological quality corresponds to comparable levels of ecosystem alteration. Comparable environmental assessments are of crucial importance for industry to receive equal treatment on environmental sustainability criteria at the European internal market, instead of heterogeneous assessment levels and protection measures.

Significant gaps still exist despite two phases of intercalibration for coastal and transitional waters. A review concluded that a degree of unevenness in the results of intercalibration across Europe reflects differences in the degree to which nations have been politically willing, and/or economically able, to prioritise basic and applied aquatic research and invest in water resource management.

In the past, the expert leads that performed intercalibration comparisons were provided by in-kind contributions of a few member countries. This loaded specific member countries with a lot of responsibility on complex analytical problems, due to the complexity of the analyses and the nature of coastal and transitional waters, without organisational support in performing the required analyses in a cost-efficient way.

Participating countries

Name	Organisation	Country
Veronique Van Den Langenbergh & Wim Gabriels	Flanders Environment Agency (VMM)	Belgium
Michael Kyramarios	Federal Public Service Health, Food Chain Safety and Environment	Belgium
David Cox	Federal Public Planning Service Science Policy (BELSPO)	Belgium
Gert Verreet	Flemish Government, Department Economy Science and Innovation (EWI)	Belgium
Jan Witt	Lower Saxony Water Management, Coastal Defence and Nature Conservation Agency	Germany
Axel Borchmann	Federal Ministry for the Environment, Nature Conservation und Nuclear Safety (BMUB)	Germany
Sara Westengaard & Guldagger Morten Brozek	Danish Nature Agency	Denmark
Marie Claude Ximenes	French National Agency for Water and Aquatic Environments (ONEMA)	France
Isabelle Terrier	Ministry of Ecology, Sustainable Development and Energy (MEEM)	France
Alison Miles	Environment Agency UK (EA)	United Kingdom
Shane O'Boyle & Robert Wilkes	Environmental Protection Agency, Ireland (EPA)	Ireland
Hans Ruiters & Marcel van den Berg	Ministry of Infrastructure and the Environment - Directorate-general for Spatial Development and Water Affairs	Netherlands
Anne Christine & Steinar Sandoy	Norwegian Environment Agency	Norway
Anneli Harlen & Jonas Svensson	Swedish Agency for Marine and Water Management (HaV)	Sweden