

Overview of OSPAR's activities on Oceans and sustainable development: integration of the three dimensions of sustainable development.

The OSPAR Convention is the current legal instrument guiding international cooperation on the protection of the marine environment of the North-East Atlantic. Work under the Convention is managed by the OSPAR Commission, which is made up of representatives of fifteen Governments and the European Union. The OSPAR Commission is the mechanism by which the Contracting Parties can reach consensus on the issues of concern and develop binding measures to deal with them. The fifteen Governments are Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom. OSPAR's maritime area covers both areas within national jurisdiction (territorial waters and Exclusive Economic Zones) and areas beyond national jurisdiction.

OSPAR is continuing work to reduce pollution and protect biodiversity focused on the bio-geographic and ecosystem characteristics of its region. The OSPAR Commission readily acknowledges its aims to protect the marine environment are in the context of rational use of the resources of the North East Atlantic Ocean. Understanding the economic and social costs and benefits of human activity in the marine environment is therefore essential, as is a means of understanding the links between human activities and pressures, and the associated impacts on the ecosystem in interaction with natural environmental change.

Key to such considerations is the understanding of the complex interactions between the many human activities, pressures, impacts and the ecosystem response. As yet, models of how to assess cumulative impacts and their interactions with the ecosystem are in their infancy and vary from country to country, and region to region. This remains a major challenge to an integrated approach to managing human activities in the marine environment. OSPAR is currently assessing three assessment methods that have been used to quantify cumulative human pressures in the marine environment. The methods under the evaluation are: the CUMULEO method of IMARES (The Netherlands), the ODEMM method (University of Liverpool, UK), and the method used in the HARMONY project (Aarhus University, Denmark). In an area of evolving understanding, decisions are pending on whether to follow one model or to integrate the best points from the three.

OSPAR is also collaborating with the International Council for Exploration of the Seas (ICES) as it also seeks to develop understanding of how to integrate assessment and decision making to deliver ecosystem based management of the marine environment. Data poverty remains a challenge in developing adequate models, however, using existing data sets from particular activities can help address this issue. A key step forward related to this is assessment of pressures from human activity, for instance the spatial footprint of various fishing activities in OSPAR's maritime area. Recent work, initiated by OSPAR and published by ICES, provides for the first time a layer of such fisheries pressure data for the North East Atlantic on which to base GIS analysis of cumulative human impacts ([http://www.ices.dk/sites/pub/Publication Reports/Advice/2014/Special Requests/OSPAR_mapping_bottom_fishing_intensity.pdf](http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2014/Special%20Requests/OSPAR_mapping_bottom_fishing_intensity.pdf)).

OSPAR has carried out a regional Economic and Social Analysis comparing methods and data between its Contracting Parties. This has highlighted that there are still significant differences in national approaches to assessing economic and social costs and benefits of human activity linked to the marine environment. Being able to better compare and integrate such varying approaches to economic and social assessment will help address more integrated regional management.

The above activities support the OSPAR North-East Atlantic Environmental Strategy, which promotes the ecosystem-based approach to managing human activities using Marine Spatial Planning and Integrated Coastal Zone Management. OSPAR has also established a working group on Marine Spatial Planning to exchange best practice.

One of the strengths of an intergovernmental organisation like OSPAR is that policy decisions made by the Contracting Parties will naturally take in social and economic considerations through internal national coordination processes. This is a strength that means that regulation of pollution, such as from offshore industry, radioactivity or land-based sources, already has social and economic practicability (such as best available techniques and best environmental practices) built into the solutions. OSPAR 2014 agreed a Regional Action Plan on Marine Litter, which has further extended OSPAR's activity to this important marine pollutant. OSPAR is also exploring how to better monitor and assess the impacts of ambient and impulsive noise in the marine environment.

In terms of practical application of activities to manage the risks from human activities, informed by the sensitivity of the ecosystem, OSPAR and the Helsinki Commission have developed guidelines for granting of exemptions to the IMO Ballast Water Management Convention. This work, which has developed an online tool for shipping operators, will ensure a consistent approach to ballast water management across two regional convention areas to enhance the protection of the marine environment.

Again, under practical implementation of integrated approaches, OSPAR has now agreed with the North East Atlantic Fisheries Commission a "collective arrangement". This sets out how the two organisations can cooperate and coordinate with respect to their activities in areas beyond national jurisdiction; in the case of NEAFC its designated no-fishing areas, and in the case of OSPAR, its Marine Protected Areas.

OSPAR's sister organisation, the BONN Agreement is also working on an integrated approach to managing the impact of accidental spills of oil and other hazardous substances in the marine environment. Under the Be Aware project (part-funded by the European Union), the risks and magnitude of spills from shipping and offshore industry have been modelled. These models are now being applied to an environmental and socio-economic sensitivity analysis of coastal areas to determine the likely impacts of such spills and the mitigating measures that the BONN Agreement parties can put in place. This approach, as well as OSPAR's approach to regulation of offshore industry, is of keen interest to be shared with the Convention for the Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region (the Abidjan Convention).