## <u>Annex – European developments in the area of coastal, marine</u> and maritime issues

The European Environment Agency (EEA), together with the European Environment Information and Observation Network (Eionet), aims to streamline monitoring and reporting activities in order to support the production of policy-relevant assessments of marine environment quality with an emphasis on ecosystem-based management issues. The following activities have been initiated and/or further developed in 2007 with a view to preparing the production of regular indicator-based assessments and the delivery of information services over the period 2008 to 2010 in support to new policies adopted by the European Union.

Via international cooperation and specific projects, the EEA shares the experience of these European activities to contribute to global monitoring and assessment activities, especially under GEOSS. The EEA co-chairs, for example, the UN expert group that aims to evaluate existing marine assessments and to propose a framework for a regular reporting process on the state of the marine environment globally.

## **European Union Marine Strategy Framework Directive and European Monitoring and Assessment**

In 2007, after 2 years of negotiations, the European Union (EU) agreed upon a marine environmental law (Marine Strategy Framework Directive, MSFD), which aims at applying an ecosystem-based approach to the management of human activities. The final aim of the MSFD is the achievement of 'good environmental status' (GES) in the marine environment by 2020. Its implementation follows a series of steps designed to develop Marine Strategies and make them operational, starting with an 'initial assessment' of the conditions of European regional seas (2012), the definitions of GES at that same level (2012), and the establishment of national targets and indicators to measure progress towards GES (2012). These are followed by the development of national monitoring programmes (2014) and programmes of measure to achieve GES and their implementation (2015, 2016). Marine Strategies will be kept up to date.

The MSFD could have an impact on 3<sup>rd</sup> countries to the EU, which will have a chance of cooperating in the development and implementation of Marine Strategies using existing structures including European regional sea conventions. Further, the MSFD draws on global commitments aiming at coherence and integration with EU laws as well as asking EU Member States to consider the implications of their actions on waters beyond their national jurisdiction in order to minimise risk of damage and, if possible, have a positive impact on them.

The European Environment Agency has supported the development of the monitoring and assessment components of the MSFD (e.g. clarification of data and information needs) via its work as co-chair of the European Monitoring and Assessment (EMMA) informal Working Group, with participation of European regional sea conventions, European Commission (EC) services, EU Member States and Accession countries, and international bodies (e.g. the International Council for the Exploration of the Sea, ICES). This Working Group has developed and is implementing a road-map to help

countries meet their MSFD obligations. The EEA will also have a role supporting MSFD implementation, e.g. in the review of the status of the marine environment in the European Community (2016-2019), to be carried out together with EC services, European regional sea conventions and other relevant bodies. For this reason, the EEA is currently working towards the establishment of a limited set of pan-European common indicators for the marine environment in the context of EMMA by 2010.

## Operational oceanography services in the European Union

Within the framework of Global Monitoring for Environment and Security (GMES), which is a joint initiative of the European Commission and European Space Agency, the European Union (EU) is developing operational oceanography services in line with GOOS community needs.

Operational oceanography has been identified as a fast track service (the Marine Core Service, MCS) delivering a suite of products to enhance marine service development in the Member States (both public and private sectors) as well as European agencies, and strengthen the European voice and role at the international level. This should be done through a FP7 research project called MyOcean (2008-2012), which would transition existing initiatives in operational oceanography into a pan-European service based on a robust and optimised ocean monitoring and forecasting core infrastructure. MyOcean will be implemented in a proposed consortium of 69 partners in 28 countries. The information produced by MyOcean will be shaped to fit the needs and then linked and used by the existing community and networks in Europe such as EuroGOOS, EU agencies (EEA, EMSA, ...), the EU Member States service providers (Met offices, coast guards, oceanographic institutions...), and the European regional sea conventions or their members (OSPAR, HELCOM, ...).

The European Environment Agency (EEA) provides regular indicator-based assessments of the state and trends of the European environment and participates in the MCS Implementation Group to:

- Define how the MCS can provide pan-European marine indicator and assessment products (based on remotely sensed data, in-situ (non-satellite) observations and models):
- Support the coordination of marine in-situ (non-satellite) monitoring to complement the above and maximize the value of MCS for pan-European marine assessments.

The EEA also participates in the group developing the European Marine Observation and Data Network (EMODNET) to ensure that MCS core and downstream services can be integrated into:

- EMODNET and thus be made easily available to the European user community;
- A future European Marine Information System.

## **European Union Maritime aspects**

The EEA is supporting the initiative by the European Commission for an Integrated Maritime Policy for the European Union, which is based on the clear recognition that

all matters pertaining to Europe's oceans and seas are interlinked, and that sea-related policies must develop in a joined-up way<sup>1</sup>. The above-mentioned MSFD constitutes the environmental pillar of such a policy. This innovative and holistic approach aims to provide a coherent policy framework that will allow for the optimal development of all sea-related activities in a sustainable manner in the face of challenges of globalisation and competitiveness, climate change, degradation of the marine environment, maritime safety and security, energy and sustainability matters. Data and integrated methodologies are therefore required to inform on and assess the growing competing uses of the sea, ranging from maritime transport, fishing, aquaculture, leisure activities, off-shore energy production and other forms of sea bed exploitation, also in the context of meeting the 'good environmental status' objective of the MSFD. The EEA, together with other EU bodies and national organisations has started identifying projects to this end (e.g. sea-bed mapping and marine habitats classification). The corresponding knowledge-based approach will be structured around and targeted at supporting maritime spatial planning, which is a fundamental tool for integrating the sustainable development of marine areas and coastal regions.

A similar development took place under the implementation of the **EU ICZM Recommendation** (Integrated Coastal Zone Management) where Member states, European Commission and EEA identified core sets of indicators for sustainable development and ICZM effectiveness, which were tested by regional and national authorities through an Interreg IIIC project DEDUCE (<a href="http://www.deduce.eu/results.html">http://www.deduce.eu/results.html</a>, see also European Commission's coastal zone policy <a href="http://ec.europa.eu/environment/iczm/">http://ec.europa.eu/environment/iczm/</a> and EEA 2006 coastal report <a href="http://eports.eea.europa.eu/eea report 2006 6/en">http://ec.europa.eu/eea report 2006 6/en</a>).

Regarding specific thematic issues, the EEA is involved in maritime transport as part of the EU transport and environment report mechanism (TERM), with the European Commission, on air emissions and oil spills. The identification and mapping of important biotopes, ecosystems and protected areas - under EU nature directives - is being gradually extended to coastal and marine areas with the view to create a coherent view of ecological networks. Finally, reflecting on the ecosystem-based approach put forward by the Maritime policy and the Marine strategy directive, the Agency is engaged in transposing and adapting the analytical frameworks and methods used for land-based analysis to the marine/maritime space. The accumulated and validated experience on terrestrial ecosystems, through accounting and spatial analysis techniques, serves as a robust basis for characterizing the marine/maritime space according its natural assets and the many and conflicting uses.

<sup>1:</sup> COM(2007) 575 final Link to document