



**MARINE STRATEGY FRAMEWORK DIRECTIVE – IMPLICATIONS AND
OPPORTUNITIES FOR JNCC**

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JOINT NATURE CONSERVATION COMMITTEE

MARINE STRATEGY FRAMEWORK DIRECTIVE – IMPLICATIONS AND OPPORTUNITIES FOR JNCC

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1. Background

- 1.1 The Marine Strategy Framework Directive (MSFD) (Directive 2008/56/EC on establishing a framework for community action in the field of marine environmental policy) was formally adopted by the European Union in July 2008. It forms the environmental pillar of the EU's Integrated European Maritime Policy to compliment the economic and social aspects of the policy (http://ec.europa.eu/maritimeaffairs/index_en.html).
- 1.2 The Directive outlines a transparent, legislative framework for an ecosystem-based approach to the management of human activities which supports the sustainable use of marine goods and services. The overarching goal of the Directive is to achieve 'Good Environmental Status' (GES) by 2020 across Europe's marine environment.
- 1.3 In order to achieve GES in a coherent and strategic manner, the Directive establishes four European Marine Regions, based on geographical and environmental criteria. The North East Atlantic Marine Region is divided into four subregions, with UK waters lying in two of these (the Greater North Sea and the Celtic Seas). Each Member State is required to develop a marine strategy for their waters (EEZs or extended Continental Shelf areas) (Figure 1), in coordination with other countries within the same marine region or subregion. This coordination is to be achieved through the Regional Seas Conventions, which for the UK is the OSPAR Convention.
- 1.4 Marine strategies will be implemented to protect and conserve the marine environment, prevent its deterioration, and, where practicable, restore marine ecosystems in areas where they have been adversely affected.
- 1.5 The marine strategies to be developed by each Member State must contain:
 - i. An initial assessment of the current environmental status of that Member State's marine waters;
 - ii. A determination of what Good Environmental Status means for those waters;
 - iii. Targets and indicators designed to show whether a Member State is achieving GES;

- iv. A monitoring programme to measure progress towards GES;
- v. A programme of measures designed to achieve or maintain GES.

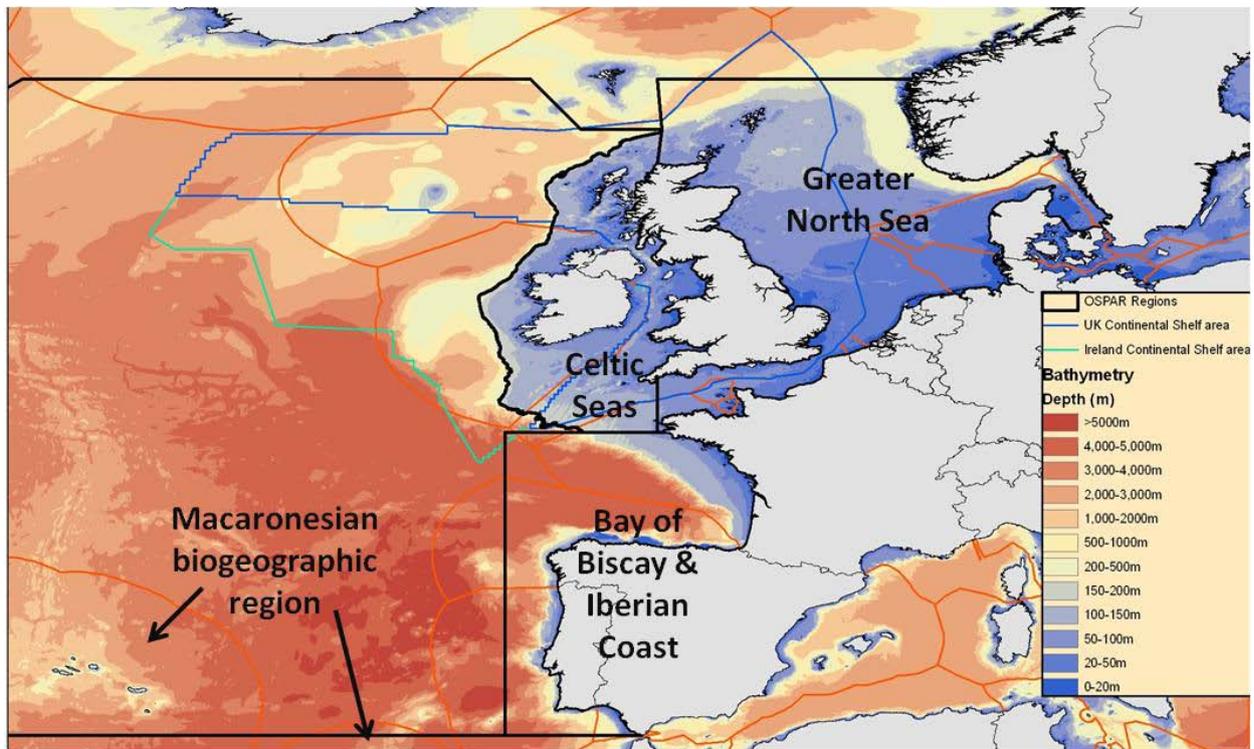


Figure 1. Map showing geographic scope of MSFD for UK and Ireland waters (Continental Shelf areas) and for other countries (EEZs in orange) (note some also claim/are claiming Continental Shelf areas). The MSFD subregions (black text) are likely to broadly equate to the OSPAR Regions (black lines) but there are significant differences where the jurisdictional limits (i.e. EEZs, CSs) extend further west.

1.6 The Directive does not state a specific programme of measures that Member States should adopt to achieve GES, except for the establishment of Marine Protected Areas (MPAs). The Directive does however outline 11 high-level descriptors of GES in Annex I of the Directive. These are as follows:

1. Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.
3. Populations of commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
4. All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.

5. Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms and oxygen deficiency in bottom waters.
6. Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.
7. Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems.
8. Concentrations of contaminants are at levels not giving rise to pollution effects.
9. Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.
10. Properties and quantities of marine litter do not cause harm to the coastal and marine environment.
11. Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.

1.7 With respect to the UK, key requirements of the Directive and associated time-frames are provided in Table 1.

Table 1. Key requirements and time frame of the MSFD, and associated UK responses.

Date	Activity	Expected UK response
July 2010	The Directive must be transposed into Member State regulations to provide a legal framework for national implementation	In the UK, the Directive will be transposed through the Marine Strategy Regulations 2010 under Section 2(2) of the European Communities Act (1972)
July 2012	An Initial Assessment of the current environmental status of each Member State's marine waters and the environmental impact of human activities, based on the environmental characteristics and pressures from human activities given in Annex III of the Directive and an economic and social analysis of the use of the sea and of the cost of degradation of the marine environment	The <i>Charting Progress 2: State of the UK Seas Report 2010</i> is expected to form the basis of the Initial Assessment. The OSPAR Quality Status Report 2010 will provide a basis for a regional-level assessment.
	A determination of GES, based on the descriptors in Annex I and the characteristics and pressures in Annex III, and associated environmental targets and indicators	Establish what GES means for UK waters, within the Greater North Sea and Celtic Seas subregions, including setting targets and identifying an appropriate set of indicators

Date	Activity	Expected UK response
July 2014	Establishment and implementation of a coordinated monitoring programme for ongoing assessment and regular updating of targets, to measure progress towards achieving GES	The UK Marine Monitoring and Assessment Strategy coordinates marine monitoring across the UK and will provide information required to measure progress towards GES. JNCC's Marine Biodiversity Surveillance Programme, being developed in collaboration with the country conservation bodies, will contribute to this UKMMAS process.
July 2015	Development of a programme of measures designed to achieve or maintain GES, taking into account relevant existing measures under other Directives and international agreements	The UK Marine and Coastal Access Act 2009 is an example of an existing measure that will contribute to GES through the establishment of MPAs and a coherent marine planning system
July 2016	Entry into operation of the programme of measures to achieve or maintain GES	Implementation of the programme of measures is expected to be coordinated, for waters in England, by the Marine Management Organisation, and through equivalent bodies in Scotland, Wales and Northern Ireland
July 2018	Review and updating of the marine strategies, including the initial assessment, the targets, the monitoring programmes and the programmes of measures	This is the first of the six-yearly reporting cycle on progress in delivery of the Directive
2020	Achievement of GES	

1.8 The Directive will be complementary to, and provide the overarching framework for, a number of other key Directives and legislation at the European and UK level. Examples include the EC Habitats Directive, the EC Birds Directive, the EU Water Framework Directive, the Common Fisheries Policy and the UK Marine and Coastal Access Act. It will also help fulfil international commitments undertaken at the World Summit on Sustainable Development and under the Convention on Biological Diversity and the OSPAR Convention.

2. Key requirements over next 4 years

2.1 The Directive has set a very challenging timetable of activities over the coming few years which focus on establishing the main mechanisms for delivery of the Directive, namely:

- i. An Initial Assessment (by July 2012)
- ii. A determination of GES (by July 2012)
- iii. Environmental targets and associated indicators (by July 2012)
- iv. Monitoring programmes (by July 2014)
- v. Programme of measures (by July 2015)

- 2.2 As these activities are to be coordinated across Member States within the regions and subregions, additional effort is needed within the regional seas conventions (OSPAR for the UK) to ensure consistency of approaches and support the delivery of an ecosystem-based approach to management of the marine environment.
- 2.3 Although much of the requirements above are expected to be delivered through existing monitoring, assessments and measures, there is nevertheless a need for substantial further consideration in areas which are currently under-developed and to integrate the work to ensure efficient and effective overall delivery. Biodiversity assessment and monitoring processes will form a key part of achieving GES and are generally less-well advanced than other aspects of environmental monitoring; development of requirements for biodiversity-related issues is considered a particular challenge.

3. Advantages in working at EU and OSPAR levels

- 3.1 Given the early state of implementation of the Directive, and the specific requirements for regional cooperation and consistency in its delivery, there will be a need for further work at both EU and OSPAR levels to develop the necessary approaches and mechanisms. Further, past experience in implementing EU Directives (such as the Water Framework Directive) has shown that an early investment of effort to help develop such EU and regional approaches can be of enormous long-term benefit to the UK in delivery of requirements. These benefits include:
 - i. Approaches developed which are in line with UK thinking, building upon the experience and expertise available within the UK;
 - ii. approaches which are appropriate to UK waters (environmental conditions, administrative mechanisms and industry uses);
 - iii. approaches which take account of existing mechanisms and requirements, such as the current work to develop integrated biodiversity monitoring programmes to meet multiple policy drivers;
 - iv. approaches which can be both effective and efficient across the very extensive areas of marine waters in the UK;
 - v. reporting systems which are appropriate to the UK's assessment and management needs;
 - vi. increased consistency in approaches, making data, assessments and reporting across regions/subregions in the future much easier;
 - vii. gaining from sharing expertise amongst Member States to provide more effective solutions;
 - viii sharing of work, which can reduce duplication of effort (avoiding parallel developments in each Member State) and provide a lead country(s) approach (where expertise is strong).
- 3.2 A lack of engagement in these early stages offers a high risk of approaches and mechanisms being developed which will not best suit UK requirements over the long-term, especially if these are developed by Member States with much smaller EEZs or ranges in industry and environmental conditions to consider.

- 3.3 It is considered important to contribute to both EU and regional-level activities to help ensure the best outcomes, with EU level work likely to set the principles for a number of technical issues and regional effort translating these into specific operational requirements.
- 3.4 Defra has already recognised the potential benefits of JNCC contributions to such EU and OSPAR processes in the following ways:
 - i. Funding a dedicated post to work on MSFD and related OSPAR issues (January 2010-March 2011);
 - ii. Encouraging JNCC to take a lead in the development of integrated biodiversity assessment and monitoring requirements within OSPAR (Biodiversity Committee). This is currently being achieved through ICG-COBAM¹ which has developed a work plan aimed at delivery of MSFD needs and which has agreed to accelerate its work in the light of the scale of MSFD needs over the next two years.

4. Possible roles for JNCC

- 4.1 As a newly-adopted Directive, Government is still developing the ways in which it might best deliver its responsibilities for MSFD, either directly through Defra and the Devolved Administrations, through UKMMAS for delivery of monitoring and assessment needs, or by other means;
- 4.2 there are three key levels at which JNCC could support Government in its delivery of the Directive, and which are in line with JNCC's statutory role:
 - i. Provision of advice at a European level, both at the EU level (such as support for European Commission meetings) and at the Regional level, through the OSPAR Convention (there is a strong regional component to the Directive);
 - ii. Co-ordination of advice and information at a UK level;
 - iii. Provision of advice for waters beyond 12nm.
- 4.3 Such work is already undertaken at all three levels for a number of other marine biodiversity-related policies, such as the OSPAR Convention, the Habitats and Birds Directives, development of the Marine Conservation Zone/Marine Protected Areas network and Charting Progress 2.
- 4.4 Possible roles are outlined below:
 - i. Support for delivery of the Directive through EU and OSPAR mechanisms, including development of EU and regional guidance on technical issues and regional cooperation aspects (Art. 5.2);
 - ii. Co-ordination (UK) and delivery (offshore) of biodiversity and ecosystem assessment aspects of the Initial Assessment (Art. 8);
 - iii. Advice on the determination of good environmental status and associated environmental targets and indicators (Art. 9, 10);

¹ Intersessional Correspondence Group on Coordination of Biodiversity Assessment and Monitoring

- iv. Co-ordination (UK) and delivery (offshore) of biodiversity monitoring programmes (Art. 11);
- v. Provision of advice on the development and delivery of Programmes of Measures (Art. 13);
- vi. Provision of information on biodiversity and ecosystem aspects for public consultations (Art. 19);
- vii. Provision of advice on interpretation of the Directive (largely a reactive role as and when needed).

5. Current JNCC resources contributing to MSFD

- 5.1 JNCC executive has recognised both its statutory responsibility to provide biodiversity advice to Government and the potential of the Directive, through its broad scope, to deliver significant benefits for biodiversity and the wider state of the marine environment. To date, JNCC has therefore actively engaged in the early stages in MSFD implementation to support Government at EU and OSPAR levels. Additionally a significant proportion of ongoing marine work will contribute directly or indirectly to its requirements.
- 5.2 In line with the rationale above, JNCC is providing an active link between its UK work (Biodiversity Surveillance and Monitoring Programme) and the EU/OSPAR level work, to promote solutions which are compatible and which overall aim for an efficient and effective monitoring process.
- 5.3 The currently resourced elements to deliver the roles outlined earlier are shown in Table 2, together with an initial indication of those elements which are not covered.

Table 2 JNCC contribution to the main biodiversity-related requirements of the MSFD (based on 2010/11 Corporate Plan, * = new from 2010/11).

	Role	GIA input	External funding	Not covered
1	Support for delivery of the Directive through EU and OSPAR mechanisms, including development of EU and regional guidance on technical issues and regional cooperation aspects (Art. 5.2). Includes EU and OSPAR level work for Art. 8, 9, 10, 11 and 13.	Advice on MSFD and OSPAR Convention <i>Enhanced engagement at EU and OSPAR levels</i> *	European Marine Adviser post (Jan. 2010 to March 2011) (Defra-funded)	

	Role	GIA input	External funding	Not covered
2	Co-ordination (UK) and delivery (offshore) of biodiversity and ecosystem assessment aspects of the Initial Assessment (Art. 8).	Development of habitat mapping and activity/pressures mapping <i>Development of an integrated assessment process within UKMMAS *</i>	UKSeaMap (UK consortium funding) EUSeaMap (EC funding)	Any significant additional assessment requirements beyond Charting Progress 2.
3	Advice on the determination of good environmental status and associated environmental targets and indicators (Art. 9, 10).	Some aspects covered by Marine Surveillance Programme		Development of reference conditions, targets and indicators for UK waters
4	Co-ordination (UK) and delivery (offshore) of biodiversity monitoring programmes (Art. 11).	Defra funding development of a UK biodiversity surveillance and monitoring programme (habitats, cetaceans, seabirds) Seabird colony monitoring		Expansion to cover other biodiversity elements (e.g. fish, seals, plankton) and MPAs being considered by Defra. Delivery of the surveillance programme.
5	Provision of advice on the development and delivery of Programmes of Measures (Art. 13).	Advice to Government, regulators and industry. Advice on reform of CFP. Natura 2000 (SAC, SPA) identification. MPA (MCZ) programme to identify network of sites by 2012 (Defra-funded).	Offshore industries advice (various external funding). SPA survey programme (country agency funded)	Enhanced engagement with MMO (and equivalents in DAs) to help integrate MSFD with Marine Planning. Enhanced input to CFP

	Role	GIA input	External funding	Not covered
6	Provision of information on biodiversity and ecosystem aspects for public consultations (Art. 19).	Data Services support		Provision of Initial Assessment data to WISE-Marine, including development of data and reporting formats (unknown scope at present)
7	Provision of advice on interpretation of the Directive (largely a reactive role as and when needed).	Ad-hoc advice provided as necessary		Potential for increased advice on specific issues (e.g. exemptions Art. 14) – can't be assessed at present.

5.5 MSFD has a series of key tasks to deliver in the period to July 2012 which will shape the way the Directive is implemented for years to come. The Marine surveillance programme will continue in this period to define its overall strategy and scope its delivery, taking into account emerging MSFD needs. The work on Natura site designation and the establishment of a network of MPAs/MCZs will continue as a high priority to meet Government targets to have the network established by 2012. Additional resources have been allocated within the 2010/11 Corporate Plan to help meet immediate priorities for EU and OSPAR-level work.