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Legal Implementation of Integrated Ocean Policies: The EU's Marine Strategy Framework Directive

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Abstract

Coastal states increasingly recognise the need to consider the interplay between different exploitation and use activities and their effects on the marine environment. Some states have adopted programmes to establish "integrated ocean policies" which aim at promoting a coordinated governance of the different activities and interests related to the seas. This article describes the hurdles and challenges the European Union faces in developing and implementing its "Integrated Maritime Policy", particularly focussing on its most developed branch, the "Marine Strategy Framework Directive". By providing a detailed insight into this supranational ocean management framework, including an elucidation of its strengths and weaknesses, this analysis will contribute to the world-wide legal discourse on integrated ocean policies.

Keywords

ocean policy; Marine Strategy Framework Directive; Integrated Maritime Policy (IMP); good environmental status

Introduction

Throughout the last decades, various international conventions, national programmes and scientific reports have highlighted the need to consider the

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interplay between different exploitation and use activities and their effects on the marine environment. In response, governments from all over the world have increasingly adopted programmes to establish "integrated ocean policies". In the 1990s, Brazil launched its National Maritime Policy; Australia and Canada followed. In the new millennium, Japan introduced its Basic Act on Ocean Policy, Norway presented a Maritime Strategy, and in the USA a Committee on Oceans Policy was established to look at these questions. New Zealand is also in the process of adopting an "Ocean Policy". The underlying rationale of all of these initiatives is that use and conservation conflicts in the seas cannot be solved by sector-by-sector approaches; rather, the new approach is to adopt holistic policies that allow for a comprehensive and coordinated governance of the different activities and interests related to the seas. 4

The European Union (EU or the Community) follows this international trend towards a more integrated approach to ocean governance with its development of an "Integrated Maritime Policy" (IMP). This article aims at explaining integration efforts under the EU's IMP, focusing on its most developed branch, the European Marine Strategy Framework Directive (MSFD), which constitutes the environmental pillar of its new integrated policy. This submis-

¹ See, e.g., Chapter 17 of Agenda 21 and Section IV of the Johannesburg Plan of Implementation of the World Summit on Sustainable Development by the United Nations Conference on Environment and Development (UNCED), available at: <www.un.org/esa/sustdev/agenda 21text.htm>; Art. 10 of the Convention on Biological Diversity (CBD) emphasises the significance of biological biodiversity; several meetings of the Conference of the Parties specified this provision in terms of marine and coastal biodiversity, available at: http://www.cbd.int/convention/; L. Juda, 'The European Union and Ocean Use Management: The Marine Strategy and the Maritime Policy' (2007) 38 *Ocean Development & International Law* 259—282; D. Caron and H. Schreiber , 'Bringing New Law to the Ocean Waters', in D. Caron and H. Schreiber (eds.) *Bringing New Law to the Ocean Waters* (Martinus Nijhoff Publishers, Leiden, 2004) 3–27. For a classic text on this topic, see, A. Underdahl, 'Integrated Marine Policy: What? Why? How?' (1980) 4 *Marine Policy* 159–169.

² L. Juda, 'Changing National Approaches to Ocean Governance' (2003) 34 *Ocean Development & International Law* 161–187.

³ Reports on national policies of Brazil, Australia, Canada, Japan, Norway, USA and New Zealand are available at: http://ioc3.unesco.org/abelos/; J. Vince and M. Haward, 'New Zealand's ocean governance: Calming turbulent waters?' (2009) 33 Marine Policy 412–418.

⁴ Recently the European Commission has characterised some of these new policy frameworks by stating that "they have all decided to develop an overall policy that allows a comprehensive, coordinated approach, ensuring sustainable development of the different sea resources and activities", Commission of the European Communities (EC), Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Guidelines for an Integrated Approach to Maritime Policy—Towards best practice in integrated maritime governance and stakeholder consultation, COM(2008) 395 final, Brussels, 26 June 2008 at 5.

sion also describes the challenges faced by the EU and its Member States in developing their integrated ocean policy and the difficulties encountered in implementing these measures.

The EU's Need for an Integrated Approach to Ocean Policies

At present, legislation at the international, EU and national levels appear to be unequipped to resolve use and conservation conflicts in EU waters.⁵ First, substantial knowledge gaps exist regarding the condition of the seas and the effects of anthropogenic pressures. Monitoring and evaluation programmes are regarded as incomprehensive and uncoordinated.⁶ Second, existing regimes governing marine environmental conservation can be characterized by gaps in the rules and a lack of overall coordination. Although the Community and Member States have some rules in place that contribute to the protection of the marine environment, e.g., by restricting and minimizing specific inputs,⁷ such measures mostly target very specific problems in certain sectors or policy areas and do not specifically aim at marine environmental conservation.⁸ Pressures from underlying sectoral groups and interests mean that marine environmental protection objectives are chronically neglected.⁹ For example,

⁵ See definition of "marine waters" in Art. 3(1) of the MSFD.

⁶ Commission (EC), Communication from the Commission to the Council and the European Parliament: Thematic Strategy on the Protection and Conservation of the Marine Environment, COM(2005) 504 final, Brussels, 24 October 2005 at 4 [hereinafter 'COM(2005) 504 final']; Commission (EC), Communication from the Commission to the Council: Fishing Opportunities for 2008—Policy Statement from the European Commission, COM (2007) 295 final at 5 [hereinafter 'COM(2007) 295 final'].

⁷ W. Erbguth and S. Schlacke, *Umweltrecht* (3rd ed. Nomos, Baden-Baden, 2010) para. 15(11) et seq.; Rainer Wolf, 'Ressourcennutzung und Ressourcenschutz in der Ausschließlichen Wirtschaftszone (AWZ)' (2008) 98 *Umwelt- und Technikrecht—Jahrbuch des Umwelt- und Technikrechts 2008* 93–146; A. Proelß, *Meeresschutz im Völker- und Europarecht* (Duncker & Humblot, Berlin, 2004); moreover, the Commission (EC), *Communication from the Commission to the Council and the European Parliament: Towards a Strategy to protect and conserve the marine environment*, COM(2002) 539 final, Brussels, 2 October 2002 at 9 et seq. [hereinafter 'COM(2002) 539 final'].

⁸ V. Frank, *The European Community and Marine Environmental Protection in the International Law of the Sea* (Martinus Nijhoff Publishers, Leiden, 2007) at 90–92; COM(2005) 504 final at 3–4; R. Wolf, *ibid*.

⁹ O. Lell and C. Steudte, 'EG und Meeresumweltschutz unter besonderer Berücksichtigung der geplanten Wasserrahmenrichtlinie', in: D. Czybulka (ed.) *Naturschutz und Rechtsregime im Küsten- und Offshore-Bereich* (Nomos, Baden-Baden, 2003) 49–77; T. Markus, *European Fisheries Law—From Promotion to Management* (Europa Law Publishing, Groningen, 2009) at 17–26, 70 et seq.

measures adopted under the Common Agricultural Policy and the Common Fisheries Policy primarily aim at guaranteeing and stabilizing production and not at protecting marine ecosystems. ¹⁰ The third reason why EU and national laws are ineffectual in resolving use and conservation conflicts in EU waters is that there is a lack of coordination between Community and international measures. ¹¹ For instance, existing marine protected areas (MPAs) in the North and Baltic Seas, which were adopted under international agreements and national legislation, are currently deemed to be largely incoherent or incomprehensive. ¹²

There has also been lack of coordination at the national level. Coastal nations increasingly develop spatial and sectoral planning instruments for their territorial seas and exclusive economic zones (EEZs). However, most of these instruments have not been coordinated with the actions taken by neighbouring states. Questions also arise regarding whether existing spatial and sectoral planning instruments, which were primarily designed to address land-based problems, really offer adequate solutions to the use and conservation conflicts at sea.¹³ Fourth, another problem seems to be that conservation measures are significantly restricted in scope and grant a very limited level of protection to the marine environment.¹⁴ Finally, regulations concerning non-material inputs and their environmental impacts (e.g., thermal, electromagnetic, light or sound) are non-systematic and yet deficient.¹⁵ In sum, the law governing marine use and conservation issues in EU waters currently lacks a master plan for balancing and coordinating environmental protection and other uses.

¹⁰ Markus, *ibid.*, at 17–22, 72–79; see also T. *Markus*, 'Making Environmental Principles Work under the Common Fisheries Policy' (2010) 19 *European Energy and Environmental Law Review* 132–144; R. Froese and A. Proelß, 'Rebuilding fish stocks no later than 2015: will Europe meet the deadline?' (2010) 11 *Fish and Fisheries* 194–202.

¹¹ COM(2005) 504 final at 3-4.

¹² P. Birnie, A. E. Boyle and C. Redgwell, *International Law & the Environment* (3rd ed., Oxford University Press, Oxford, 2009) at 747; A. Gillespie, *Protected Areas and International Environmental Law* (Martinus Nijhoff, Leiden, 2007) at 107, 122.

¹³ F. Douvere and C. Ehlers, 'New perspectives on sea use management: Initial findings from European experience with marine spatial planning' (2009) 90 *Journal of Environmental Management* 77–88.

¹⁴ R. Wolf, op. cit., supra note 7 at 137.

¹⁵ K. Scott, 'Sound and Cetaceans: A Regional Response to Regulating Acoustic Marine Pollution' (2007) 10 *Journal of International Wildlife Law & Policy* 175–199 at 179; S. J. Dolman, C. A. Weir und M. Jasny, 'Comparative review of marine mammal guidance implemented during naval exercises' (2009) 58 *Marine Pollution Bulletin* 465–477.

The MSFD in the Broader Context of the EU's Maritime and Fresh Water Policy

The EU is currently in the process of developing its IMP. The IMP is described in the Green Paper entitled "Towards a Future Maritime Policy for the Union: a European Vision for the Oceans and Seas", which was presented by the European Commission on 7 June 2006. The Green Paper advances the idea that all activities significant for the seas should be subjected to a cross-sectoral management. It calls for an effective coordination and integration of marine policy areas at all levels. Following a one-year consultation period, the Green Paper was followed by the Bluebook, which proposed certain goals, such as sustainable development of economic growth, employment and marine environmental conservation. The Bluebook is supplemented by an action plan that sets out additional Community measures to promote an integrated marine policy, including establishing the "European Maritime Days", the creation of a roadmap for developing marine spatial planning, etc. 19

The IMP incorporates the MSFD as its "environmental pillar". ²⁰ However, it is important to note that the structure and legal status of the MSFD is quite different from that of the IMP. While the MSFD is a binding directive, the IMP at this stage merely constitutes a bundle of declarations of intentions and

¹⁶ Commission (EC), Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Towards a future Maritime Policy for the Union—A European Vision for the Oceans and Seas, COM(2006) 275 final, Volume I, Brussels, 7 June 2006.

¹⁷ See COM(2002) 539 final at 3 et seq.

¹⁸ Commission (EC), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: An integrated Maritime Policy for the European Union, COM(2007) 575 final, Brussels, 10 October 2007.

¹⁹ See Commission Staff Working Document: Accompanying document to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions An Integrated Maritime Policy for the European Union—Impact Assessment Summary, SEC(2007) 1280, Brussels, 10 October 2007; Commission (EC), Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Progress Report on the EU's integrated Maritime Policy, COM(2009) 540 final, Brussels, 15 October 2009; see also Commission (EC), Commission Staff Working Document—Accompanying document to the Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Progress Report on the EU's Integrated Maritime Policy, SEC(2009) 1343 final, Brussels, 15 October 2009 [hereinafter 'SEC(2009) 1343 final'].

²⁰ MSFD, Recital 3; see also L. Juda, 'The European Union and the Marine Strategy Framework Directive: Continuing the Development of European Ocean Use Management' (2010) 41 *Ocean Development & International Law* 34–54 at 44.

administrative actions. Both measures also emphasise different policy objectives. The main reasons for these differences are that a) the MSFD is simply older than the IMP and b) that the development of the MSFD was assigned to the European Commission's Directorate General of the Environment, whereas the IMP was assigned to the Directorate General for Maritime Affairs and Fisheries (DG MARE). While the latter's focus is primarily on promoting the marine economic sector in reviving the Lisbon Strategy, the DG Environment concentrates on environmental protection. In order to avoid contradictory policies between the MSFD and IMP, the Commission established a "Steering Group of Commissioners", a "Maritime Interservice Policy Group", and a "Member States Expert Group". These committees promote the development of joint and coherent decision-making, monitor the day-to-day progress of the IMP and enhance information exchange between national public servants.²²

To better understand the MSFD's development and content one must look to the Community's fresh water policy, which has undergone developments similar to the EU's ocean policies and has significantly influenced the shape and structure of MSFD measures.²³ The EU's water policy began in the early 1970s as sectoral regulations, which mainly addressed fresh water-related issues. By the end of the 1980s, the Community had adopted over 30 relevant directives.²⁴ However, water policy at this time lacked consistency due to compartmentalized organisation and a missing comprehensive legal framework. In 2000, the Water Framework Directive (WFD) was adopted as a new approach to water policy. It aimed at overcoming the patchwork of laws and integrating the existing regulations.²⁵ For the first time under the Community's environmental policy, legislation aimed at protecting (fresh) water as a

²¹ J. Edler, 'Vom Grünbuch zum Blaubuch—Eine integrierte Meerespolitik für die Europäische Union', in G. Schernewski, H. Janßen and S. Schumacher (eds.), *Coastline Reports* 12: *Coastal Change in the Southern Baltic Sea Region* (EUCC—The Coastal Union, Rostock, 2009) 25–36.

²² SEC (2009) 1343 final at 5.

²³ For example, the concept of "good environmental status" under the MSFD is quite similar to the concept of "good surface water status", "good groundwater status", and "good ecological status" of the Water Framework Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for the Community action in the field of water policy, OJ L 327, 22.12.2000; see also Juda, *op. cit., supra* note 20 at 37.

²⁴ F. Barth, 'Die neue Wasserrahmenrichtlinie der Europäischen Union—Chance oder bürokratisches Hemmnis für die Europäische Wasserpolitik?' (1997) 49 (5) *Wasser und Boden* 7–9.

²⁵ Commission (EC), Communication from the Commission to the Council and the European Parliament: European Community: Water Policy, COM(96) 59 final, Brussels, 21 February 1996.

whole, thus promoting an ecological approach.²⁶ In practice, the content of water policy measures, particularly the WFD, is also highly relevant to the implementation and interpretation of the MSFD.²⁷ The WDF and MSFD share a close connection in terms of content, objectives and regulatory design, and together they aim to manage ecosystems that are highly interdependent. Given this context, the MSFD may eventually be seen as the next step towards ecosystem-oriented management of the Community's water resources.

The Marine Strategy Framework Directive

Formation

In November 2002, as a part of the Community's 6th Environmental Action Programme, 28 the Commission published the Communication "Towards a strategy to protect the marine environment".²⁹ In the Communication, the Commission analyses the present condition of the marine environment, the status and development of relevant sectors, and existing relevant political and legal measures under Community law. In March 2003, the European Council of Ministers expressly asked the Commission to present a "Thematic Strategy for the protection of the marine environment" by May 2005 at the latest. 30 At the same time, an extensive public consultation process took place through the establishment of working groups to deal with topics such as "targets", the "ecosystem approach", "monitoring" and "dangerous substances". Conferences in Køge (4-6 December 2002) and Rotterdam (11-12 November 2004), as well as extensive consultations, were held. Questions of coordination and cooperation between the future Marine Strategy and regional instruments and institutions were discussed at the international level, especially between the Commission and the secretariats of regional conventions (e.g.,

²⁶ The geographical scope of the WFD will be explained in more detail below.

²⁷ See, e.g., below on "geographical and substantial scope".

²⁸ Environment Action Programmes are launched according to Art. 175(3) of the EC Treaty. Decision No. 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme, OJ L 242, 10.9.2002; see also the Commission (EC), Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Mid-term review of the Sixth Community Environment Action Programme, COM(2007) 225 final, Brussels, 30 April 2007.

²⁹ COM(2002) 539 final.

³⁰ Council Conclusion—Towards a Thematic Strategy to Protect and Conserve the Marine Environment, 4 March 2003, Doc. No. 7164/03 at 3–4.

OSPAR, HELCOM, BSC, MEDPOL, etc.).³¹ Based on these efforts, the Council issued final instructions to the Commission regarding the content of the strategy.³² The Council requested that the Commission specifically consider eco-systematic, socio-economic and regional aspects as well as to keep in mind existing Community law on the protection of the marine environment.

On 24 November 2005, the Commission published its "Thematic Strategy on the Protection and the conservation of the marine environment". This strategy consisted of a central Communication by the Commission,³³ an impact assessment³⁴ and a first draft of the directive's proposal for a Marine Strategy Framework Directive.³⁵ Statements and Communications were provided by the European Economic and Social Committee,³⁶ the Council of the Regions,³⁷ the Council,³⁸ the European Parliament (over 80 amendments after

³¹ European Commission, *EU Marine Strategy—The story behind the Strategy*, (Office for Official Publications of the European Communities, Luxembourg, 2006) at 17–20.

³² Council of the European Union, 2632nd Council Meeting, Environment, Brussels, 20 December 2004, 15962/04 (Presse 357).

³³ COM(2005) 504 final.

³⁴ Commission (EC), Commission Staff Working Document: Annex to Communication from the Commission to the Council and the European Parliament: Thematic Strategy on the Protection and Conservation of the Marine Environment and Proposal for a Directive of the European Parliament and of the Council establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Directive)—Impact Assessment, SEC(2005) 1290, Brussels, 24 October 2005 [hereinafter 'SEC(2005) 1290'].

³⁵ Commission (EC), Proposal for a Directive of the European Parliament and of the Council establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Directive), COM(2005) 505 final, Brussels, 24 October 2005; cf. hereunto M. Rossi, 'Eine Strategie zum Schutz der Meeresumwelt?' (2007) 93 Umwelt- und Technikrecht—Jahrbuch des Umwelt- und Technikrechts 2007 81–104; M. Salomon, 'The European Commission proposal for a Marine Strategy: Lacking substance' (2006) 52 Marine Pollution Bulletin 1328–1329; A. Borja, 'The new European Marine Strategy Directive: Difficulties, opportunities, and challenges' (2006) 52 Marine Pollution Bulletin 239–242; German Advisory Council on the Environment (SRU), The European Commission Proposal for a Marine Strategy: Shying European Responsibility?, Comment on Environment Policy No.5, 2006; Juda, op. cit., supra note 1.

³⁶ Opinion of the European Economic and Social Committee on the Proposal for a Directive of the European Parliament and of the Council establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Directive), OJ C 185, 8.8.2006.

³⁷ Opinion of the Committee of the Regions on the Directive of the European Parliament and of the Council establishing a framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Directive) and on the Communication from the Commission to the Council and the European Parliament—Thematic Strategy on the Protection and Conservation of the Marine Environment, OJ C 206, 29.8.2006.

³⁸ Council of the European Union, 2757th Council Meeting, Environment, Luxembourg,

the first reading, 63 after the second)³⁹ and the Commission.⁴⁰ On 17 June 2008 the European Parliament and the Council finally adopted the Marine Strategy Framework Directive.

Position in the EU's System of Marine Environmental Law

The MSFD's main goal is to establish a framework within which the "Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest". ⁴¹ Regarding existing Community and Member State legislation on the protection of the marine environment, the MSFD only states that it "shall contribute to coherence between [...] the different policies, agreements and legislative measures which have an impact on the marine environment". ⁴² In addition, the MSFD aims at "ensur[ing] the integration of environmental concerns". ⁴³ It also states that to achieve its goals, a "transparent and coherent legislative framework is required" and that this judicial framework in turn should provide an "overall framework for action" that "enable[s] the action taken to be coordinated, consistent and properly integrated" with "action under other Community legislation and international agreements". ⁴⁴ Therefore, the MSFD is not an extensive codification of existing marine protection regulations, nor

²³ October 2006, 13989/06 (Presse 287) at 18 et seq.; Council of the European Union, 2773rd Council Meeting, Environment, Brussels, 18 December 2006, 16164/06 (Presse 349) at 7; Council of the European Union, 2816th Council meeting, General Affairs and External Relations, Brussels, 23 July 2007, 11911/07 (Presse 170) at 17; Council of the European Union, 2866th Council Meeting, Economic and Financial Affairs, 8850/08 (Presse 113) at 34.

³⁹ Session document of the European Parliament, Doc. No. A6–0373/2006 (after 1st reading); Session document of the European Parliament, Doc. No. A6–0389/2007 (after 2nd reading).

⁴⁰ Commission (EC), Communication from the Commission to the European Parliament pursuant to the second subparagraph of Article 251 (2) of the EC Treaty concerning the Common position of the Council to the adoption of a European Parliament and Council Directive establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Framework Directive), COM(2007) 456 final, Brussels, 27 July 2007 [hereinafter 'COM (2007) 456 final']; Commission (EC), Opinions of the Commission pursuant to Article 251 (2), third subparagraph, point (c) of the EC Treaty, on the European Parliament's amendments to the Council's common position regarding the proposal for a Directive of the European Parliament and of the Council establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Framework Directive), COM(2008) 5 final, Brussels, 10 January 2008.

⁴¹ MSFD, Art. 1(1).

⁴² MSFD, Art. 1(4).

⁴³ *Ibid*.

⁴⁴ MSFD, Recital 9.

does it instantaneously modify any existing laws or impose any comprehensive obligations on the Member States. ⁴⁵ Its regulatory ambition remains highly restricted, and can be understood as a supplementary Community legal framework within which existing and future Community and Member State conservation measures are to be developed and enhanced. ⁴⁶

Purpose and Basic Structure

The MSFD requires Member States to take the necessary measures "to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest". ⁴⁷ Member States are required to develop and implement marine strategies to protect and preserve the marine environment, prevent its deterioration or, where practicable, restore marine ecosystems. ⁴⁸ The strategies shall also be developed to prevent and reduce inputs in the marine environment, with a view to phasing out pollution so as to ensure that there are no significant impacts on or risks to marine biodiversity. ⁴⁹ National marine strategies must apply an ecosystem-based approach to the management of human activities ond coordinate such efforts at the regional or sub-regional levels. ⁵¹ The Community's role in this process is limited to guiding the strategic development that takes place at the national level by providing a temporal, procedural and substantive framework. The MSFD only assigns coordinative and (somewhat restricted) controlling competences to the Commission. ⁵²

Member States have to take six procedural steps according to an "action plan", which is further subdivided into two phases: a) preparation and b) establishing programmes of measures.⁵³ The preparation is comprised of four procedural steps:

 Initial assessment of the current environmental status in accordance with Article 8 of the MSFD (by 15 July 2012)

⁴⁵ See particularly restrictions in Arts. 13(5), 14(1) to (4) and 15(1) to (2) of the MSFD.

⁴⁶ See Recital 11 of the MSFD: "Each Member State should therefore develop a marine strategy for its marine waters which, while being specific to its own waters, reflects the overall perspective of the marine region [...] concerned."

⁴⁷ MSFD, Art. 1(1).

⁴⁸ According to Art. 1(2)(a) of the MSFD.

⁴⁹ According to Art. 1(2)(b) of the MSFD.

⁵⁰ MSFD, Art. 1(3).

⁵¹ MSFD, Art. 5(1) to (2) and Art. 6.

⁵² See also caveat in Recital 43 of the MSFD.

⁵³ MSFD, Art. 5(2).

- Determination of good environmental status in accordance with Article 9 of the MSFD (by 15 July 2012)
- Establishment of a series of environmental targets and associated indicators, in accordance with Article 10(1) of the MSFD (by 15 July 2012)
- Establishment and implementation of a monitoring programme for ongoing assessment and regular updating of targets, in accordance with Article 11(1) of the MSFD (by 15 July 2014).

Setting up programmes of measures is comprised of two procedural steps:

- Development of a programme of measures designed to achieve or maintain good environmental status, in accordance with Article 13(1) to (3) of the MSFD (by 2015)
- Entry into operation of the programme in accordance with Article 13(10) of the MSFD (by 2016).

Where the status of the sea in a marine region is "so critical as to necessitate urgent action",⁵⁴ Member States shall devise a plan of action, which includes an earlier entry into operation of programmes of measures, as well as possible stricter protective measures.⁵⁵ The provision on the development of the marine strategies in the MSFD is followed by a number of rules on exceptions,⁵⁶ coordination⁵⁷ and reporting obligations,⁵⁸ public consultations and information, and the updating of national strategies. Finally, the MSFD establishes provisions on the adaptation of the Annexes of the MSFD (every six years),⁵⁹ as well as provisions for the regulation of methodological standards and technical formats for applying the Annexes.⁶⁰ The Annexes, for example, comprise: qualitative descriptors for determining good environmental status (Annex I), indicative lists of characteristics, pressures and impacts on marine waters (Annex III), as well as an indicative list of characteristics to be taken into account for setting environmental targets (Annex IV).

⁵⁴ The meaning of the phrase 'where the status of the sea is so critical as to necessitate urgent actions' must be interpreted in the light of the initial assessment and the definition of 'good environmental status' under Arts. 3(5), 8, and 9 MSFD, as well as in the light of the interpretation of Art. 14(1) to (4) MSFD, particularly the terms "significant risk" under Art. 14(4) MSFD, see below.

⁵⁵ MSFD, Art. 5(3).

⁵⁶ MSFD, Art. 14.

⁵⁷ MSFD, Arts. 15 and 16.

⁵⁸ MSFD, Arts. 18, 20 and 21.

⁵⁹ MSFD, Arts. 17 and 24(1).

⁶⁰ MSFD, Art. 24(2).

Geographical and Substantive Scope

The wording of the MSFD does not explicitly reveal its geographical and substantive scope, and this leads to questions regarding the definition and scope of its rules, particularly in relation to other existing (secondary) Community laws. According to Article 2(1), the MSFD applies to "to all marine waters as defined in Article 3(1)". Article 3(1)(a) and (b) of the MSFD defines marine waters as a) "waters, the seabed and subsoil on the seaward side of the baseline from which the extent of territorial waters is measured extending to the outmost reach of the area where a Member State has and/or exercises jurisdictional rights, in accordance with the UNCLOS" and b) "coastal waters as defined by Directive 2000/60/EC, [...], in so far as particular aspects of the environmental status of the marine environment are not already addressed through that Directive or other Community legislation". 61 Thus, in principle, the MSFD applies to the territorial waters, EEZs and adjacent continental shelf (if relevant)⁶² of Member States. It also applies to their coastal waters within the meaning of Article 2(7) of the WFD to the extent that they are not subject to regulation by the WFD or other regulations.⁶³ Article 2(7) of the WFD defines "coastal waters" as "surface waters on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured [...]". For example, Arts. 1 and 2(1) and (7) of the WFD extend the WFD's general geographical scope to the "one nautical mile zone" as well as the entire territorial sea in respect of the chemical status.⁶⁴

 $^{^{61}}$ lanks inserted by the authors, see Art. 3(1)(a) and (b) of the MSFD. The MSFD does not apply either to the waters of neighbouring countries and sovereign territories listed in Annex II of the treaty nor in the French overseas departments and administrative units, see Art. 3(1)(a) MSFD

⁶² "Regulations [as institutional acts adopted on the basis of the Treaty], apply in principle to the same geographical area as the Treaty itself. Respective acts must, however, at least implicitly, apply their geographical scope to the areas in question." See Case 61/77, *Commission v. Ireland*, [1978] ECR, paras. 45–46.

⁶³ Italics have been inserted by the authors: See Art. 2(7) of the WFD, Directive 2000/60/EC, OJ L 327, 22.12.2000. See also R. Barnes and D. Metcalfe, 'Current Legal Developments—The European Union' (2010) 25 *The International Journal of Marine and Coastal Law* 81–91 at 82.

⁶⁴ Art. 2(1) WFD states that "surface water means inland waters, except groundwater; transitional waters and coastal waters, except in respect of chemical status for which it shall also include territorial waters." Italics have been inserted by the authors. According to the Commission, the MSFD should also have been applicable to the transitional waters of the WFD, see COM(2007) 456 final at 10.

Article 2(1) of the MSFD declares that the MSFD takes a transboundary approach, which means that its territorial scope considers areas beyond Community waters: "[t]his Directive shall apply to all marine waters as defined in Article 3(1), and shall take account of the transboundary effects on the quality of the marine environment of third States in the same marine region or subregion". Of course, this does not imply an extraterritorial extension of the MSFD's territorial scope. Article 2(1) of the MSFD simply indicates that the Directive shall "take account" of the transboundary effects on the marine environment of third States. Accordingly, Member States are obliged to coordinate and collaborate within the Community as well as (trans-) regionally when compiling their marine strategies (in particular, by including Russia). 65 In addition to these procedural coordination duties, the MSFD obliges the Member States to "consider the implications of their programmes of measures on waters beyond their marine waters in order to minimise the risk of damage to, and if possible have a positive impact on, those waters".66 Taking into account the general duties under UNCLOS, 67 this provision requires that Member States ensure at a minimum that they do not cause damage or threats of damage, or transfer damage to areas in the high seas.⁶⁸

Although some topics have been expressly excluded from the MSFD, the wording of the policy does not clearly indicate its substantive scope. One might argue that the scope is determined by the MFSD's regulatory purpose, which is to oblige the Member States to develop and implement strategies that enable them to achieve good environmental status by 2020. The policy does not aim at a comprehensive joint codification of existing measures for the protection of the marine environment, nor does it attempt to alter them. Accordingly, the Member States must take into account relevant Community law when designing their programmes of measures. Where these programmes include spatial protection measures, legislation must adequately cover those areas identified under measures such as the Habitats Directive or the Birds Directive, as well as any relevant international agreements.

The MSFD also expressly excludes a number of areas from its substantive scope. It does not apply to "activities the sole purpose of which is defence or

⁶⁵ See MSFD Art. 5(2), Art. 6(1) and (2), Art. 3(9), Recitals 13 and 20. Although the MSFD is in general not applicable in Member States without marine waters, they shall, nonetheless, be integrated in coordination where appropriate. See Recital 15 and Art. 6(2) of the MSFD.

⁶⁶ MSFD, Art. 13(8).

⁶⁷ See Art. 192 et seq. of the 1982 United Nations Convention on Law of the Sea (LOSC).

⁶⁸ MSFD, Recital 17.

⁶⁹ MSFD, Art. 13(2).

⁷⁰ MSFD, Art. 13(4) and (5).

national security".⁷¹ Furthermore, measures regulating fisheries management can only be taken in the context of the Common Fisheries Policy.⁷² In addition, the Directive does also not address the regulation of discharges and emissions resulting from the use of radioactive material, which falls within the sphere of Articles 30 and 31 of EURATOM.⁷³

The hierarchy of norms and the competences set out in Community law⁷⁴ suggests that the existing rules from areas such as agricultural policy or sea traffic⁷⁵ may not be modified by the Member States' programmes. This is reflected in the MSFD's Articles 15(1) and (2): "Where a Member State identifies an issue which has an impact on the environmental status of its marine waters [...] linked to another Community policy or international agreement, it shall inform the Commission accordingly and provide a justification to substantiate its view." The Commission "reflects" the Member States' notification and recommendation under Article 15(2) "as appropriate" when presenting related proposals to the European Parliament or the Council.⁷⁶

The following sections will examine more closely the different procedural steps and legal requirements that address the action plan's development and implementation.

The Initial Assessment

Member States are to make an initial assessment of their marine waters in respect of each marine region or sub-region by 15 July 2012.⁷⁷ The marine regions are defined in the MSFD as the Baltic Sea, the North-east Atlantic

⁷¹ MSFD, Art. 2(2), Art. 13(4) and (5).

⁷² MSFD, Recital 39. In relation to the Fisheries Policy, a contradiction seems to arise. Member States ought to consider fish populations in determining the good environmental status according to Annex I No. 3. On a subordinate level of measures, this contradiction remains insignificant against the background of Art. 15(1) and (2), as well as Recital 39. On the generally existing conflict of jurisdiction between fisheries policy and environmental policy, see T. Markus, *op. cit., supra* note 9 at 51–64.

⁷³ MSFD, Recital 39.

⁷⁴ See Arts. 2 and 3 of the Treaty on the Functoining of the Eruopean Union (TFEU); J. Bast and A. von Bogdandy, 'The European Union's Vertical Order of Competences: the Current Law and Proposals for its Reform' (2002) 39 *Common Market Law Review* 227–268; G. de Búrca and B. de Witte , 'The Delimitation of Powers Between the EU and its Member States', in: A. Arnull and D. Wincott (eds.) *Accountability and Legitimacy in the European Union* (Oxford University Press, Oxford, 2002) 201–222.

⁷⁵ Agricultural policy is generally based on Art. 43 of the TFEU rules concerning sea traffic on the basis of Art. 100 Par. 2, see Proelß, *op. cit.*, *supra* note 7 at 351 *et seg*.

⁷⁶ MSFD, Art. 15(2); see also Art. 13(5) MSFD.

⁷⁷ MSFD, Art. 5(1) and (8).

Ocean, the Mediterranean Sea and the Black Sea.⁷⁸ In executing their obligations, the Member States must take due account of the fact that their marine waters form an integral part of these regions by considering the diverse conditions, problems and needs of these areas.⁷⁹ In order to take into account the specificities of a particular area, the Member States can choose to implement the Directive by reference to subdivisions at the appropriate level of the marine waters referred to in Article 4(1) and (2) of the MSFD.⁸⁰ The initial assessment also involves determining whether a further subdivision is useful for ecological, biological, morphological, or utilization-oriented or spatial planning reasons.⁸¹

The initial assessment must provide an analysis of the essential features, characteristics, and the current environmental status of the waters in question. In addition, it should include an investigation of the predominant pressures and impacts, including any human activity, as well as an economic and social analysis of the use of those waters. 82 The analysis of essential features and characteristics, as well as the current environmental status, of the waters must take account of the definition of the "environmental status" in Article 3(4) of the MSFD and the indicative lists in Annex III Table 1 MSFD. "Environmental status' means the overall state of the environment in marine waters, taking into account the structure, function and processes of the constituent marine ecosystems together with natural physiographic, geographic, biological, geological and climatic factors, as well as physical, acoustic and chemical conditions, including those resulting from human activities inside or outside the area concerned." The analysis must also be based on the indicative lists of elements set out in Annex III Table 1, which mention physical, chemical, biological and other features.

The review of the predominant pressures and impacts should be based on the indicative lists set out in Annex III Table 2, and cover the qualitative and quantitative mix of the various pressures, as well as any discernible trends. Furthermore, there must be an examination of the main cumulative and synergetic effects and any relevant assessments that have been made under

⁷⁸ MSFD, Art. 4(1).

⁷⁹ MSFD, Recital 10.

⁸⁰ MSFD, Art. 4(2).

⁸¹ See, e.g., Analyse des Bundesamts für Seeschiffart und Hydrographie, Umweltbericht zum Raumordnungsplan für die Ausschließliche Wirtschaftszone (AWZ) der Nordsee (Ostsee), available at: <www.bsh.de/de/Meeresnutzung/Raumordnung_in_der_AWZ/index.jsp>.

⁸² MSFD, Art. 8(1)(a,b and c).

existing Community legislation. Annex III Table 2 lists 18 different pressures and impacts of a physical, chemical, hydrological and acoustic nature.⁸³

The Member States are then required to draw up an economic and social analysis of the distinctive use of the waters and the costs of deterioration of the marine environment. The MSFD does not provide illustrative or indicative lists to facilitate this. However, the Commission and the European Environmental Agency have substantial experience with such analyses and methodical knowledge; data and preparatory work from various "impact assessments" in the fisheries or environmental area can be made available to the Member States if requested.⁸⁴

Both from a practical and logical perspective, selecting or developing uniform evaluation criteria and methods precede the initial assessment. These criteria constitute the basis (or "epistemic frame") of the assessment of the current environmental status within the meaning of Article 8(1)(a) of the MSFD. The criteria, which are based on the initial assessment, are also essential for determining good environmental status under Article 9(1) of the MSFD.85 The selection or development of methods for the initial assessment should therefore consider the requirements of Article 9 of the MSFD, which contains a list of Descriptors in Annex I. At present, the Member States develop assessment criteria and methods for the initial assessment, as well as for the description of good environmental status. This is done partly in cooperation with each other, and partly with institutions like the Joint Research Centre, the International Council for the Exploration of the Seas (ICES) and OSPAR.86 However, it must be noted that information on marine water and scientific knowledge about assessment criteria currently differ significantly between Member States.

The MSFD also deals with the problem of reviewing the consistency of the initial assessment criteria.⁸⁷ The appraisals should take into account the "relevant provisions of existing Community legislation, in particular Directive 2000/60/EC" for coastal, transitional and territorial waters. Additional mea-

⁸³ MSFD, Art. 8(1)(b).

⁸⁴ See, e.g., European Commission SEC(2005) 1290, op. cit., supra note 35; Bundesrepublik Deutschland, Operationelles Programm Europäischer Fischereifond, CCI-Nr. 2007/DE 14 FPO 001, 7. 12. 2007.

⁸⁵ See also Recital 1 and Annex Part A No. 9 of Draft Commission Decision "of... 2010 on criteria and methodological standards on good environmental status of marine waters", D009576/02, not officially published yet.

⁸⁶ More on that in the next subparagraph.

⁸⁷ MSFD, Art. 8(2) and (3).

sures, such as the Nitrate Directive, 88 Sewage Directive, 89 Bathing Water Directive and Habitats Directive will also be important in this respect. The coordination measures set out in Articles 5 and 6 of the MSFD will also promote the application of coherent evaluation methods within the entire marine region or sub-region. 92 Although the MSFD provides some guidance in this area, Member States are confronted with enormous challenges in finding consistent assessment criteria.93 For example, the WFD primarily takes into account biological components for its status analysis; the MSFD lists biological and other components, and thus is broader in scope than the WFD.⁹⁴ Moreover, the MSFD requires an analysis of distinct anthropogenic pressures and impacts.⁹⁵ The WFD groups the ecological status of surface waters into five classes, while the MSFD only refers to two classes. 96 Such differences must be considered when assessing the status of coastal waters, where there is an overlap in the scope of the MSFD and the WFD.97 Eventually, a methodological approach is to be created that guarantees that methods and assessment criteria under the MSFD meet the requirements of the WFD and other relevant Directives.98

Determining the Good Environmental Status

The pivotal aim of the MSFD is that the Member States achieve good environmental status as defined in its Article 3(5). According to Article 9(1) of the MSFD, Member States shall describe "a set of characteristics for good environmental status" for their marine regions by reference to the initial assessment. This description should be based on the "qualitative descriptors listed

⁸⁸ Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agriculture sources, OJ L 375, 31.12.1991.

⁸⁹ Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment, OJ L 135, 30.5.1991.

⁹⁰ Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC, OJ L 64, 4.3.2006.

⁹¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, OJ L 206, 22.7.1992.

⁹² MSFD, Art. 8(2) and (3).

⁹³ See opinion of the Federal Environment Agency on the proposal of a Marine Framework Directive as part of the European Marine Strategy from 24. 10. 2005 (unpublished).

⁹⁴ MSFD, Annex III, Table 1.

⁹⁵ MSFD, Annex III, Table 2.

⁹⁶ The MSFD only refers to the environmental status and the good environmental status.

⁹⁷ See above under 'territorial and substantial scope'.

⁹⁸ As required by Art. 8(2) and (3) of the MSFD.

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in Annex I" and consider the indicative lists in Annex III Table 1, as well as the pressures and impacts of human action mentioned in Annex III Table 2. Article 3(5) of the MSFD puts forward a highly ambitious definition of "good environmental status":

[T]he environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive within their intrinsic conditions, and the use of the marine environment is at a level that is sustainable, thus safeguarding the potential for uses and activities by current and future generations.

This definition is complemented by additional criteria that require, e.g., that ecosystems "function fully" and that anthropogenic inputs "do not cause pollution effects". ⁹⁹ In the end, however, the content of the words "good environmental status" will be determined by the Member States themselves, based on the somewhat unclear descriptors set out in Annex I. The MSFD provides further guidance on this issue by requiring the Member States to apply an ecosystem approach. ¹⁰⁰ According to Article 1(3) of the MSFD, the purpose of the ecosystem approach is to

ensur[e] that the collective pressure of such activities is kept within levels compatible with the achievement of good environmental status and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while enabling the sustainable use of marine goods and services by present and future generations.

To ensure coherence, consistency and comparability, the criteria and methodological standards for determining good environmental status are to be harmonised in accordance with the so-called Comitology procedures (regulatory procedure). ¹⁰¹ In late May 2010, the Commission proposed the "Decision on criteria and methodological standards on good environmental status of marine waters". ¹⁰² The Decision specifies the criteria for assessing the extent to which good environmental status is being achieved in relation to each descriptor listed in Annex I of the MSFD. Explanations and definitions are based on assessments by task groups set up by ICES and the Joint Research Centre, as

⁹⁹ See Art. 3(5)(a) and (b) of the MSFD.

¹⁰⁰ MSFD, Art. 3(5) subparagraph 2.

¹⁰¹ MSFD, Art. 9(3) and Art. 25(3).

¹⁰² Draft Commission Decision "of 2010 on criteria and methodological standards on good environmental status of marine waters" (not in the Official Journal yet).

well as consultations with the secretariats of regional seas conventions. ¹⁰³ Although the Decision clarifies most of the descriptors for good environmental status, the Commission also notes that there is "substantial need to develop additional scientific understanding" for others. ¹⁰⁴ In principle, Member States are required to consider each of the criteria and related indicators listed in the Commission Decision's Annex, "in order to identify those which are to be used to determine good environmental status". ¹⁰⁵ If, on the basis of the initial assessment, it is their view that it is not appropriate to use one or more of these criteria, they are required to provide a justification to the Commission. ¹⁰⁶ Three of these descriptors will be explained in greater detail below in order to provide examples of the approach under the Commission Decision, as well as to highlight some problems associated with it.

Descriptor 1 of Annex I of the MSFD requires that

[b]iological 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.

The Draft Commission Decision states that an assessment is required at several ecological levels, i.e., species, habitats and ecosystems. The species assessment should consider species distribution (range, pattern, area covered), population size (abundance and/or biomass) and population condition (demographic characteristics or genetic structure). The habitat assessment should take into account habitat distribution (range, pattern), extent (area, volume, where relevant), and condition (typical species and communities, relative abundance and/or biomass, as appropriate, as well as physical, hydrological and chemical conditions). The ecosystem analysis includes an assessment of the ecosystem structure (i.e., composition and relative proportion of

Framework Directive Newsletter, available at: <www.defra.gov.uk/marine/pdf/environment> (August 2009). With regard to evaluation methods and procedures existing prior to the adoption of the MSFD, see, e.g., D5 "eutrophication": OSPAR Commission, Ecological Quality Objectives for the Greater North Sea with Regard to Nutrients and Eutrophication Effects (2005); D3 "commercial fish stocks": see, e.g., ICES, Report of the ICES Advisory Committee on Fishery Management, Advisory Committee on the Marine Environment and Advisory Committee on Ecosystems—Book I (ICES, Copenhagen, 2007); D 10 "marine litter": OSPAR Commission, Marine Litter in the North-East Atlantic Region (2009); see also Marine Conservation Society (MCS), Beachwatch 2007—The 15th Annual Beach Litter Survey Report, Ross-On-Wye 2008, available at: <www.adoptabeach.org.uk> (Stand: August 2009).

¹⁰⁴ Draft Commission Decision, Recital 3.

¹⁰⁵ See Art. 1 and Annex Part A, No. 8 of the Draft Commission Decision.

¹⁰⁶ Annex Part A, No. 8 of the Draft Commission Decision.

ecosystem components for both habitats and species). Eventually, these criteria will provide a broad framework for the assessment of ecosystems. Methodologies and characteristics of species, habitats and ecosystems are to be determined by the Member States.

Descriptor 3 of Annex I of the MSFD requires that "[p]opulations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock". The Commission Decision refers to three important indicators of the health of the population: fishing pressure, reproduction capacity of fish stocks, and population age and size distribution. Fishing pressure is to be determined by two additional indicators: fishing mortality and catch/biomass ratio. Fishing mortality is defined in the Draft Decision, which states that "achieving good environmental status requires F values [(mortality rate)] are equal or lower than F-MSY, the level capable of producing Maximum Sustainable Yield"—and an even lower mortality for mixed fisheries. Where information on fishing mortality rates is not available, the catch/biomass ratio yielding MSY can be taken as an indicative reference. "The value for the indicator that reflects F-MSY needs to be determined by scientific judgment [...]." Alternatively, Member States may base their assessment on the reproductive capacity of stocks or population age and size distribution. While the primary indicator for the reproductive capacity is the spawning stock biomass "that would achieve MSY under a fishing mortality equal to F-MSY", the secondary indicator, i.e., the "biomass index" requires that there is a "high probability that the [respective] stock will be able to replenish itself under the existing exploitation conditions". The final criteria for an indicator, i.e., "population age and size distribution", are basically built on the idea that "healthy stocks" are characterized by high survival of old, large individuals (proportion of large fish, mean maximum length, 95 percentile of the fish length distribution observed in research vessel surveys, size at first sexual maturity). The criteria with respect to fish stocks are quite specific and appear to be very complex and difficult to implement. 107 In certain instances, the implementation process may be hindered by the fact that there are insufficient data available to apply them. For example, in 2007 only 29 of 126 Total Allowable Catches (TACs) set under the Common Fisheries Policy were based on full scientific assessment. 108

Descriptor 2 of Annex I of the MSFD is concerned with the introduction of energy, including underwater noise. It requires that the introduction is at levels "that do not adversely affect the marine environment". The Commis-

¹⁰⁷ See also, Markus, op. cit., supra note 10.

¹⁰⁸ COM(2007) 295 final at 5.

sion explains that additional scientific and technical progress is required to support the development of the criteria related to this descriptor in order to determine the "impact on marine life". At present, the "main orientations for the measurement of underwater noise have been identified as a first priority in relation to assessment and monitoring." Accordingly, Member States are required to assess and monitor different sounds based on criteria with respect to distribution in time and place, which are set out in the Draft Decision.¹⁰⁹

These three examples show that some of the criteria remain unclear (e.g., energy and sound), while others are more clear but quite general (e.g., biodiversity), and others are specific but appear to be very complex and difficult to implement (e.g., fish stocks). 110 The Commission's Draft Decision offers Member States alternative criteria, as well as the possibility to "opt-out" of certain criteria where these are deemed inappropriate based on initial assessment and provided that justification is given to the Commission. Given the differences in ecosystems throughout the EU, as well as the complexity of some of the criteria (e.g., fish), this flexible approach seems appropriate. On the other hand, descriptors must be comparable. For implementation purposes, even where the criteria are relatively precise for certain descriptors, there may be insufficient data available to apply them. The MSFD and Draft Commission Decision both note these challenges and propose that an adaptive management strategy be used to circumvent this problem.¹¹¹ The Commission also emphasizes the need to develop scientific knowledge about the functioning of the oceans. 112 On the whole, the Member States appear to have a large amount of discretion in determining good environmental status. This discretion provides room for political value judgments. 113 Eventually, success will thus depend on how the Member States value the marine environment,

¹⁰⁹ For current developments, see International Council for the Exploration of the Seas (ICES), Report of the Ad-hoc Group on the Impacts of Sonar on Cetacean and Fish (AGISC), Copenhagen, 2005; Marine Mammal Commission (Advisory Committee on Acoustic Impacts on Marine Mammals), Report to the Marine Mammal Commission, Washington D.C., 2005; National Research Council (NRC), Marine Mammal Populations and Ocean Noise: Determining When Noise Causes Biologically Significant Effects, (National Academic Press, Washington D.C., 2005).

¹¹⁰ See also Markus, op. cit., supra note 10.

¹¹¹ See particularly Art. 12 of the MSFD.

¹¹² See also Commission (EC), Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: A European Strategy for Marine and Maritime Research—A coherent European Research Area framework in support of a sustainable use of oceans and seas, COM(2008) 534 final, Brussels, 3 September 2008.

¹¹³ L.D. Mee and others, 'How good is good? Human values and Europe's proposed Marine Strategy Directive' (2008) 56 *Marine Pollution Bulletin* 187–204.

such as which pressures and risks they will deem acceptable, and whether they will be able to implement and apply the chosen criteria.

Determination of Environmental Goals

The Member States are to establish a comprehensive set of environmental targets and associated indicators for their marine waters for each marine region by 15 July 2012, in order to guide progress towards achieving good environmental status. 114 These should take into account existing environmental targets at the national, Community or international levels, as well as the indicative lists set out in Table 2 of Annex III and the characteristics listed in Annex IV. Annex VI is particularly useful as it specifies these obligations and makes various requirements regarding the definition of environmental targets. For example, the Member States must define measurable goals and associated indicators that allow for monitoring and assessment. 115 They shall also specify the resources needed to achieve the goals, formulate targets with a timescale for their achievement and pay due consideration to social and economic concerns. 116

Establishing and Implementing Monitoring Programmes

The Member States are to establish and implement coordinated monitoring programmes on the basis of the initial assessment by 15 July 2014 for the ongoing assessment of the environmental status, and in accordance with the requirements in the indicative lists in Annexes III and the environmental targets laid down in Article 10 of the MSFD.¹¹⁷ The monitoring programmes should be compatible within marine regions and build upon the relevant assessment and monitoring provisions laid down in Community legislation and international agreements.¹¹⁸ Within three months of their establishment, the Member States are required to notify the Commission of their monitoring programmes.¹¹⁹

¹¹⁴ MSFD, Art. 10.

¹¹⁵ MSFD, Annex IV, No. 3(b).

¹¹⁶ MSFD, Annex IV, Nos. 5, 6 and 9.

¹¹⁷ MSFD, Art. 11(1).

¹¹⁸ *Ibid.*, subparagraph 2.

¹¹⁹ MSFD, Art. 11(3).

Assessment of Preparatory Measures by the Commission

At the end of the preparation phase, Article 12 of the MSFD provides that the Commission will assess the Member States' determinations of the good environmental status, the environmental targets and the monitoring programmes on the basis of "whether, in the case of each Member State, the elements notified constitute an appropriate framework to meet the requirements of this Directive". According to Article 12 of the MSFD, the Commission "shall consider the coherence of frameworks within the different marine regions or subregions and across the Community." The Commission's reference points appear to be rather vague. Accordingly, Article 12 of the MSFD does not assign the Commission the authority to direct; it can only advise the Member States to adopt modifications that it considers to be necessary.

Programmes of Measures (Development and Entry into Operation)

Member States are required to identify the measures that need to be taken in order to achieve or maintain good environmental status by 2015 at the latest. 120 In doing so, they must consider the kinds of measures mentioned in Annex VI (e.g., input and output controls, spatial and temporal distribution controls, etc.). They shall also take into account certain relevant measures under Community legislation.¹²¹ When drawing up the programme of measures, Member States must give due consideration to sustainable development and, "in particular", to the social and economic impacts of the measures envisaged. 122 Furthermore, it is explicitly mentioned in the MSFD's recitals that those measures should be devised on the basis of "precautionary principle and the principles that preventive action should be taken, that environmental damage should, as a priority, be rectified at source and that the polluter should pay". 123 Member States should also ensure that measures are cost-effective and technically feasible, and carry out impact assessments, including cost-benefit analyses, prior to the introduction of any new measure. 124 In addition, programmes of measures must include spatial protection measures, contributing to coherent and representative networks of MPAs. 125 Member States must notify the Commission and any other affected Member State of their programmes of

¹²⁰ MSFD, Art. 13(1).

¹²¹ MSFD, Art. 13(2).

¹²² MSFD, Art. 13(3).

¹²³ MSFD, Recitals 27 and 44.

¹²⁴ MSFD, Art. 13(3).

¹²⁵ MSFD, Art. 13(4).

measures, within three months of their establishment. 126 Member States must also ensure that the programmes are made operational within one year of their creation (by 2016). 127

The Commission will assess whether the Member States' programmes constitute an appropriate framework that meets the requirements of the MSFD. 128 As with the determination of good environmental status, as well as environmental targets and monitoring programmes, the Commission only checks for coherence of measures within the different marine regions, across the Community and with the requirements in the MSFD. It may provide "guidance" to the Member States on any modifications it considers necessary. 129

Where a Member State identifies an issue which has an impact on the environmental status of its marine waters and which cannot be tackled by measures adopted at national level, or an issue which is linked to another Community policy or international agreement, it must inform the Commission accordingly and provide a justification to substantiate its view. 130 The Commission can, "as appropriate", reflect Member States' initiatives when presenting legislative proposals to the European Parliament and to the Council. This provision aims at maintaining the existing order of competences, particularly in the areas of fisheries and agricultural policies. 131 The problem is that, in principle, the Community has an exclusive competence in the area of fisheries management and shares competences with Member States in the area of environmental policy. For example, where fishery activities are to be restricted in the interest of marine conservation (for whose protection Member States may be competent or even obliged under Community law), Member States may do so only in accordance with Community fisheries law. 132 In order to safeguard Community competences in the area of fisheries, the MSFD has opted for a cooperative solution. 133

¹²⁶ MSFD, Art. 13(9).

¹²⁷ MSFD, Art. 13(10) and Art. 5(2)(b)(ii).

¹²⁸ MSFD, Art. 16.

¹²⁹ *Ibid*.

¹³⁰ MSFD, Art. 15.

¹³¹ See above under 'geographical and substantial scope'.

¹³² R. Churchill and D. Owen, *The EC Common Fisheries Policy* (Oxford University Press, Oxford, 2010) at 192–193, 263–266; Markus, *op. cit., supra* note 9 at 51 *et seq.*

¹³³ *Ibid.*; see also Commission Guidelines for the establishment of the Natura 2000 networks in the marine environment, available at: http://ec.europa.eu/environment/nature/natura 2000/marine/index en.htm>.

Exceptions

According to Article 14(1)(a) to (e) of the MSFD, Member States may identify instances where the environmental targets or good environmental status cannot be achieved through measures taken by the Member State¹³⁴ or cannot be achieved within the scheduled time. 135 Exceptions are, *inter alia*, permitted where an action or inaction exists for which the Member State concerned is not responsible, or where natural causes or force majeure hinder the achievement. In addition, they can be justified where "modifications or alterations to the physical characteristics of marine waters brought about by actions taken [by the Member States themselves] for reasons of overriding public interest which outweigh the negative impact on the environment" exist. 136 The latter exception, for example, might apply to the planning and establishment of off-shore wind farms or off-shore gas pipelines which, in turn, may contribute to a reduction of greenhouse gases. 137 The Member State concerned must unambiguously identify such instances in its programme of measures and substantiate its view to the Commission. Nevertheless, the Member States are required to take appropriate ad hoc measures that continue to pursue the environmental targets and prevent further deterioration in the status of the marine waters. 138

In addition to the exceptions laid down in Article 14(1), Article 14(4) of the MSFD contains a broad "general exception". In principle, Member States are obliged to adopt all of the preparatory measures and prepare and implement programmes of measures. However, they are not required "to take specific steps where there is no *significant risk* to the marine environment, or where the costs would be disproportionate (taking account of the risks to the marine environment), and provided that there is no further deterioration." ¹³⁹

¹³⁴ MSFD, Art. 14(1)(a) to (d).

¹³⁵ SFD, Art. 14(e) and Recitals 29 to 32.

¹³⁶ Brackets were inserted by the authors. See also MSFD, Recital 30.

¹³⁷ It should be noted that a similar exemption exists in Art. 4(7) of the WFD. However, Art. 4(7) of the WFD creates more stringent and clearer criteria under which exemptions are possible. Against this background, it may be assumed that Art. 14(1)(d) MSFD grants Member States a wide margin of political discretion, providing them with greater latitude to argue that the exemption in Art. 14 MSFD applies to their situation and that the environmental target or good environmental status cannot be achieved in every respect.

MSFD, Art. 14(1) subparagraph 3.

¹³⁹ Italics have been inserted by the author. For cost reasons, the exception was added because some Member States were of the opinion that the goal of achieving environmental status potentially impinges on the proportionality principle; see Commission of the European Communities, *Report from the Commission on subsidiarity and proportionality (15th report on Better Lawmaking*, 2007), COM(2008) 586 final, Brussels, 26 September 2008 at 9.

Only the initial assessment is excluded from the general exception. If a Member State decides against taking any measures, it must provide the Commission with the necessary justification to substantiate that decision, "while avoiding that the good environmental status is permanently compromised". It should be noted that the German and the French version of the Directive refer to "erhebliche Gefahr" or "risque important", respectively. However, these terms are not necessarily congruent with the English understanding of the legal term "significant risk"; they are likely to refer to different degrees of or potential for damage. More fundamentally, it is unclear what would constitute a "significant risk". Possible examples could include oil-tanker collisions, submerged WWII bombs, sunken submarines, etc. However, would fish stocks that fall outside of safe biological limits also constitute a significant risk? In addition, it appears to be somewhat contradictory that Article 14(4) requires that "the good environmental status is [not] permanently compromised", but at the same time demands that "that there is no further deterioration" to the marine environment. 140 This could mean that the current environmental status has to be maintained while potential measures may be postponed to a later date.

At present, the extent to which the Member States will make use of this opt-out option is unclear. However, the "opt-out potential" of Article 14 is quite substantial and appears to contradict the purpose of the MSDF: thus it has the potential to erode the MSDF's positive impacts. When the Member States present their programmes of measures—by 2015 at the latest—it will eventually be shown what effect the opt-out clause will have.

Public Participation and the Commission's Reporting Obligations

Member States must ensure that all interested parties are given early and effective opportunities to participate in the implementation of the Directive. 142 Therefore, Member States are required to publish a summary of all of the elements of their marine strategies and the related updates and make these available to the public for comment. 143 In addition, information and data related to the Marine Strategy must also be made available to the Commission and the European Environment Agency. 144

 $^{^{140}}$ We thank Dr. Harald Ginzky from the German Federal Environmental Agency for making us aware of this contradiction.

¹⁴¹ See R. Barnes and D. Metcalfe, *op. cit.*, *supra* note 63 at 82; J. Falke, 'Neue Entwicklungen im Europäischen Umweltrecht' (2009) *Zeitschrift für Umweltrecht* 505–509.

¹⁴² MSFD, Art. 19(1).

¹⁴³ MSFD, Art. 19(2).

¹⁴⁴ MSFD, Art. 19(3).

The Commission faces extensive reporting duties under the new policy. For instance, it is required to publish a first evaluation report on the implementation of the MSFD within two years of receiving information provided by the Member States on their programmes of measures. Furthermore, the Commission must report on any progress achieved in the establishment of MPAs by 2014. 146

Coherence, Coordination, and Harmonisation

In addition to achieving good environmental status, the MSFD intends to "contribute to coherence between, and aim to ensure the integration of environmental concerns into, the different policies, agreements and legislative measures which have an impact on the marine environment."147 The legal framework required for achieving these objectives should provide an overall course of action and ensure that it is "coordinated, consistent and properly integrated with action under other Community legislation and international agreements."148 The question arises, however, whether the MSFD's provisions meet these objectives. Measures that aim to promote coherence, coordination and harmonisation remain nonbinding to a large extent. Although the MSFD requires that the Member States consider existing regulation (duty to aim at consistency)149 and to coordinate themselves regionally (duty to aim at coordination), 150 it largely fails to provide clear guidance and concrete rules on how to implement these obligations. Accordingly, the policy grants the Commission a more limited advisory mandate for responding to the notifications of Member States made in accordance with Articles 9(2), 10(2) and 11(3), 13(9).151

Some concerns remain in terms of implementation. First, for several reasons that are not entirely clear, the Member States seem to have disparate interests regarding the implementation of the MSFD, and, as a result, their willingness to cooperate might suffer. A weak commitment to cooperation, in turn, might substantially undermine the operation of the MSFD. The second implementation issue concerns the coordination of the marine environmental policies with other policy sectors that are primarily governed by the

¹⁴⁵ MSFD, Art. 20(1).

¹⁴⁶ MSFD, Art. 21(1).

¹⁴⁷ MSFD, Art. 1(4), Recital 9.

¹⁴⁸ MSFD, Recital 9.

¹⁴⁹ See Art. 8(2), Art. 1(1) subparagraph 2; Art. 13(2 and 4) of the MSFD.

¹⁵⁰ MSFD, Recital 1 and Art. 3(9), Art. 5(2), Art. 6, Art. 8(3).

¹⁵¹ See Arts. 12 and 16 of the MSFD.

Community: it could be problematic that Member States only have the right to draw up initiatives which might not lead to concrete action beyond the national level. If a Member State identifies issues which have an impact on the marine environment and cannot be tackled by adopting national legislation, the only action they can take is to provide supporting information to the appropriate Community organ or international entity in the hope that this cause will be taken up. This criticism is particularly relevant to the areas of fisheries and agricultural policy, as these areas are significant for marine environmental protection. As it stands, the success of the Member States' environmental initiatives remain under the auspices of the responsible DG of the Commission, the Council in its specific departmental composition, or the competent international body. The question may be raised whether such an approach can help in the near future to overcome those sectoral approaches that the MSFD actually intends to overcome.

Instruments

The MSFD does not introduce any concrete conservation measures at Community or national levels. It only demands that Member States add spatial protection measures to their programmes of measures, ¹⁵⁴ which are to be devised according to the list in Annex VI. ¹⁵⁵ For instance, these measures are to regulate the extent or quality of human activities or limits of disturbance of ecosystems. Furthermore, Annex VI mentions "measures that influence the where and the when an activity is allowed to occur". In addition, the MSFD proposes instruments for improving tracing of contamination, as well as for setting economic incentives.

Implementation Requirements

Member States must bring into force the laws, regulations and administrative provisions necessary to comply with the Directive by 15 July 2010. This means that they integrate the Directive into their national laws and give effect to them. Two points may guide this process. First, the MSFD primarily aims

¹⁵² MSFD, Arts. 13(5) and 15(1 and 2).

¹⁵³ On the sectoral approach of the Fisheries Policy, see Markus, *op. cit., supra* note 9 at 17–26.

¹⁵⁴ MSFD, Art. 13(4); "Given the wide sweep of the proposed IMP, with its attention to the multitude of uses of marine space, [...] maritime spatial planning has become a focal point of attention in EU institutions", see Juda, *op. cit., supra* note 20 at 444.

¹⁵⁵ MSFD, Art. 13(1) subparagraph 2.

¹⁵⁶ MSFD, Art. 26(1).

at protecting the marine environment. Second, its scope and objectives, structure, and system of indicators closely relate to and must be aligned with those of the WFD and other Directives concerned with fresh water. Both aspects could support the integration of the MSFD into the water laws of the Member States. However, such a code appears to be too complex to handle in practice. Accordingly, the MSFD should be transposed into a stand-alone national marine environmental framework law, which explicitly refers to all of the relevant provisions in the Member State's water and nature protection and planning codes. Finally, by 15 July 2010, the Member States are required to designate an authority (or more) for each marine region or subregion to implement the MSFD.¹⁵⁷

Evaluation

The following two sections will highlight the challenges for implementing the EU's integrated ocean policies, particularly its most developed environmental pillar, the MSFD. In addition, some critical remarks will be made.

Implementation

The EU and its Member States must surmount several hurdles on their way to an integrated ocean policy, i.e., the EU's IMP. First, an initial assessment must provide a sufficient and shared understanding of the status of the marine environment, the pressures to which it is exposed, the state of regulation and finally the relevant interests and policy objectives within the different sectors. To this end, Member States must develop a "common language" or a shared "epistemic frame". This means that scientific concepts for describing the marine environment have to become congruent. This alone creates major difficulties. Looking at the complex set of descriptors and indicators listed in Annexes I, III and IV of the MSFD, Member States face a major challenge in coming up with a coherent implementation concept that makes use of these benchmarks when defining good environmental status and establishing environmental targets, etc. A common understanding of the legal terminology is also required when interpreting the measures set out in the IMP and MSFD. The complexity of the political process has meant that important legal concepts remain vague. For example, the understanding of "significant risk" may differ between Member States.

¹⁵⁷ MSFD, Art. 7(1).

To overcome these hurdles, it might be worth assigning the development of descriptors and indicators and specific questions regarding the implementation of the MSFD to a scientific body associated with the Commission. This is usually done within the context of other Community policies that also rely heavily on scientific advice. 158 A second barrier to an integrated oceans policy is the significant number of different legal requirements that exist under EU and international law. It is necessary that the EU and its Member States take into account the wide range of legal concepts and obligations, as well as the substantial and territorial scope of existing legislation (as well as implementation criteria) when implementing the measures set out in the IMP and MSFD. This ultimately requires a coordination of efforts, particularly for actions planned and taken in different sectors. Third, the competence order under (primary) Community law must be respected. Although the Member States decide for themselves what they consider to be good environmental status, some issues can only be regulated at EU level (e.g., fisheries). In that sense, interests may collide and must be balanced appropriately—particularly by the Council—on fisheries and agriculture. 159 Ultimately, establishing scientific concepts and coordinating efforts on a number of different governance levels requires a large amount of good will from Member States and the relevant sectors involved. In the end, it will not be possible for a single Member State or sector to achieve good environmental status by acting alone.

Critical Remarks

It may be argued that IMP and MSFD have achieved very little with respect to the goal of integrating and harmonising existing Community and national law on the protection of the marine environment. At present, the IMP is basically in the process of developing and structuring coordination and communication between sectors. Indeed, the MSFD does not impose any concrete environmental conservation standards or instruments. ¹⁶⁰ The objectives, targets, implementation concepts and even assessment criteria remain vague and require further specification during the implementation process. As a result, there is an imminent danger that protection requirements will ultimately vary across the different marine regions. At the same time, provisions that foster

¹⁵⁸ See, e.g., Arts. 22, 24, 28, 29 *et seq.* of Regulation (EC) No. 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, OJ L 31, 1.2.2002.

¹⁵⁹ See Case C-127/02 Waddenzee [2004] ECR I-7405.

¹⁶⁰ MSFD, Recital 43.

coherence, coordination and harmonisation, including the Commission's competences, are underdeveloped. Regarding the integration of different policy areas at the Community level, Member States are merely invited to submit proposals to the Commission and Council to be considered for future legislative action "as appropriate". For these reasons, it remains to be seen whether the MSFD will, e.g., contribute in the short term to resolving the long-term crisis under the Common Fisheries Policy. 161 Moreover, even though Member States are required to eventually achieve good environmental status, they have been left a wide margin of discretion regarding their individual level of commitment. This applies to the determination of good environmental status and to the establishment of environmental targets and programmes of measures. In addition, the MSFD has included a number of broadly drafted exceptions in Article 14. Member States are only obligated to act where there is a significant risk to the marine environment. Against this background it seems questionable whether the MSFD goes beyond the scope of the existing conservation requirements in EU and international law. Furthermore, when setting environmental targets and drawing up programmes of measures, Member States are allowed to consider social and economic conditions. 162 In the light of the sustainability principle anchored in primary law this seems to be appropriate. However, it is to be hoped that the discretionary margin opened up by this provision does not lead to a devaluation of ecological interests. 163 In addition, the question arises as to whether it would have been appropriate to require that the Member States give greater consideration to the environmental status of the High Seas. 164 At present, the MSFD does not oblige the Member States, as flag states, underwater-mining nations, and as sources of pollution whose effects are felt far from their origin, to approach the question of High Seas conservation systematically. Finally, the MSFD provisions do not explicitly refer to the precautionary principle as a legal requirement; only the recitals mention that the Member States must base their programmes of measures on the precautionary principle. 165 Given the substantial knowledge gaps regarding

¹⁶¹ Critical already to the proposal of the MSFD, see Rossi, *op. cit., supra* note 37, at 101–102; L. van Hoof and J. van Tatenhove, 'EU marine policy on the move: The tension between fisheries and maritime policy' (2009) 33 *Marine Policy* 726–732.

¹⁶² MSFD, Annex IV No. 9, Art. 13(3).

¹⁶³ See, e.g., Markus, *op. cit.*, *supra* note 10; or, more generally, see G. Winter, 'A Fundament and Two Pillars: The Concept of Sustainable Development 20 Years after the Brundtland Report', in: H.C. Bugge and C. Voigt (eds.) *Sustainable Development in International and National Law* (Europa Law Publishing, Groningen, 2008); see also Juda, *op. cit.*, *supra* note 23 at 42.

¹⁶⁴ As defined under the LOSC.

¹⁶⁵ MSFD, Recitals 27 and 44.

the effects of anthropogenic pressures on the marine environment, the omission of this as a requirement is unfortunate.

Conclusions

By 15 July 2012 at the latest, the Member States will have prepared their initial assessment, description of good environmental status, the definition of environmental targets and associated indicators, as well as established and implemented a monitoring programme. At present, they are in the process of carrying out the initial assessment, which requires that they examine existing evaluation criteria or develop new ones. The adoption of the criteria and methodological standards for determining good environmental status at Community level may be seen as a first step in this regard. One crucial challenge is to establish consistency among the various methodologies, techniques and evaluation systems that are applicable under the different EU measures. It also seems that the timeframe might be unrealistic, as many Member States doubt that a timely implementation can occur. There is also a lack of data on specific marine regions, and this poses enormous financial and temporal challenges for some Member States.

Realistically, the MSFD must be seen for what it is: "not the end, but rather another step, in an ongoing process of policy evolution [...]". 166 The best case is that the MSFD, as a part of the IMP, initiates a dynamic process in the development of an integrated marine management programme. In particular, it likely that the MSFD will play an important role in the development of the methodological standards and assessment criteria. More importantly, given the Member States' initial unwillingness to adopt a far-reaching directive (which was partly due to the implementation difficulties with the WFD), the MSFD can also be regarded as a promising first step towards an integrated ocean policy. It remains to be seen, however, what the Member States are eventually willing to commit themselves to within their programmes of measures which will be published in 2015.

¹⁶⁶ Juda, op. cit., supra note 23 at 45.