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## THE CONCEPTUAL ANALYSIS OF ECOSYSTEM-BASED APPROACH FOR THE EUROPEAN UNION MARINE STRATEGY FRAMEWORK DIRECTIVE\*

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### ABSTRACT

In this article, the European Union (EU) Marine Strategy Framework Directive (MSFD) is examined by applying to the conceptual approach in order to understand the

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importance of normative principles for the ecosystem-based approach in the MSFD. Among these principles, the integration and the precautionary principles are regarded as the most significant principles for the ecosystem-based approach in the MSFD because they are related to ‘Maritime Spatial Planning’ and ‘Adaptive Management’ which are the most important policy tools for the functioning of the MSFD. However, it is essential to have a common understanding of these two principles in a regional level since the ecosystem-based approach requires for regional cooperation not only between EU Member states but also neighbouring states in the same marine region.

**Keywords:** •Maritime Spatial Planning •Adaptive Management •Integration  
•Precautionary •Regional Cooperation

## ÖZ

Avrupa Birliği (AB) Deniz Stratejisi Çerçeve Direktifi (DSÇD) içerisinde yer alan normatif prensiplerin ekosistem-temelli yaklaşım açısından önemini anlayabilmek için bu makalede kavramsal analiz yapılmaktadır. Buradaki prensipler arasında yer alan bütünleşme ve ihtiyatlılık prensipleri, DSÇD’nin en önemli politika araçları olarak görülen ‘Deniz Mekansal Planlama’ ve ‘Uyarlanabilir Yönetim’ ile doğrudan ilgili olmalarından ötürü, DSÇD’nin ekosistem temelli yaklaşımının uygulanması açısından en dikkate değer olan prensipler oldukları düşünülmektedir. Bunun yanında bu iki prensip için bölgesel düzeyde ortak bir anlayışa sahip olunması gerekli görülmektedir çünkü ekosistem temelli yaklaşım sadece AB üye devletleri arasında değil, bunun yanında aynı deniz bölgesinde yer alan diğer komşu devletlerinde bölgesel işbirliğini gerektirmektedir.

**Anahtar Kelimeler:** •Deniz Mekânsal Planlama •Uyarlanabilir Yönetim •Bütünleşme  
•İhtiyatlılık •Bölgesel İşbirliği

## INTRODUCTION

When the European Union (EU) Marine Strategy Framework Directive (MSFD)<sup>1</sup> is examined by applying to the conceptual approach, it is realised that there are many important normative principles taken part in the MSFD related to EU environmental policy. In this context, the preamble of the MSFD prescribes that actions related to objectives of the MSFD should be based on the principles referred to the Article 174 of the Treaty on the Functioning of the European Union<sup>2</sup>. It is likely to declare that these principles are generally applied to EU environmental policy therefore, these principles are comprehensive. Although

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<sup>1</sup> The EU Marine Strategy Framework Directive (2008), Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy, Official Journal of the European Union.

<sup>2</sup> Ronán Long, ‘The Marine Strategy Framework Directive: A New European Approach to the Regulation of the Marine Environment, Marine Natural Resources and Marine Ecological Services’ (2011) 29 Journal of Energy & Natural Resources Law 1, 10–11.



these principles have been developed for EU environmental policy for a broad context, these principles were also used in the formulation of the ecosystem-based approach in the MSFD for a specific context.

It can be asserted that the ‘Maritime Spatial Planning’ and ‘Adaptive Management’ are the most important tools for the implementation of ecosystem-based approach initiated by the MSFD. The ‘integration’ principle in maritime spatial planning and ‘precautionary’ principle in adaptive management are deeply rooted for the effectiveness of ecosystem-based approach. However, the ecosystem-based approach also requires for regional cooperation not only between EU Member states but also neighbouring states in the same marine region. In that respect, there is a need to have a common understanding of these two principles in a regional level.

Europeanisation process literature has proved us the fact that even among the EU Member States, there are differences for the application of these principles of EU environmental policy because of member states’ various policy styles. It can be argued that this situation is also valid for the MSFD that the integration and precautionary principles which have crucial role for the implementation of the ecosystem –based approach.

In this article, it is debated that for the actual implementation of ecosystem-based approach, maritime spatial planning and adaptive management are the most important policy tools envisaged in the MSFD, however for the success of these policy tools in the regional level, there is a need to establish new dialogue mechanism for the implementation of integration and precautionary principles among both member states and neighbouring countries.

## **I. THE MARINE STRATEGY FRAMEWORK DIRECTIVE IN GENERAL**

It is obvious that EU made a fundamental transformation in its traditional approach of the management of marine environment in 2008 with the adoption of the Marine Strategy Framework Directive (MSFD). The MSFD’s adoption has been described as an important milestone for EU’s marine environmental policy since it is first legal framework instrument of EU for protecting the marine environment as the main purpose of maintaining biodiversity and enabling oceans and seas clean, healthy and productive<sup>3</sup>. Before examining the MSFD, it

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<sup>3</sup> *ibid.* 2–4.



is crucial to understand the EU's approach to 'Integrated Maritime Policy' in order to understand the general policy context for the development of the MSFD.

The European Commission in 2007 declared the view that 'Integrated Maritime Policy' is essential in order to provide coherent policy framework for the sustainable use of the oceans and seas<sup>4</sup>. The pressure on marine environment as a result of human activities has made it necessary to have a new legislation for the protection and sustainable use of the European Seas. The 'Integrated Maritime Policy' and then the MSFD are representing the new era for the EU in a way that while the 'Integrated Maritime Policy' covers the economic and social use of the European Seas, the MSFD brings out a "comprehensive framework for the protection of the marine environment"<sup>5</sup>. The adoption of the European Integrated Maritime Policy (IMP) covers the cross-cutting policies of the EU therefore, it has also provided a road map on Maritime Spatial Planning in addition to its sustainable development approach. It is a cornerstone legislation with an ecosystem-based approach while aiming to integrate environmental protection with multi-sectoral economic development through achieving 'Good Environmental Status' (GES) for EU marine waters<sup>6</sup>.

The MSFD is the environmental component of the European integrated marine approach and sets up a legislative framework. The MSFD is built on an initial assessment of the existing environmental status of national marine waters and socio-economic analysis of human activities in oceans and seas<sup>7</sup>. The main goal of the MSFD is the protection of the marine environment in Europe and sustainable use of natural resources which are necessary for continuity of economic and social activities. In order to accomplish this goal, MSFD aims to achieve or maintain good environmental status in Europe's seas<sup>8</sup>.

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<sup>4</sup> Jan-Stefan Fritz and John Hanus, 'The European Integrated Maritime Policy: The Next Five Years' (2015) 53 *Marine Policy* 1, 1.

<sup>5</sup> Judith van Leeuwen, Luc van Hoof and Jan van Tatenhove, 'Institutional Ambiguity in Implementing the European Union Marine Strategy Framework Directive, *Marine Policy*' (2012) 36 *Marine Policy* 636, 636.

<sup>6</sup> A Abramic and others, 'Implementation of the Marine Strategy Framework Directive in Macaronesia and Synergies with the Maritime Spatial Planning Process' (2020) 122 *Marine Policy* 104273, 1.

<sup>7</sup> Harold Levrel and others, 'The Maintenance Costs of Marine Natural Capital: A Case Study from the Initial Assessment of the Marine Strategy Framework Directive in France' (2014) 49 *Marine Policy* 37, 37.

<sup>8</sup> Christine Bertram and Katrin Rehdanz, 'On the Environmental Effectiveness of the EU Marine Strategy Framework Directive' (2013) 38 *Marine Policy* 25, 26.



Both the Integrated Maritime Policy (IMP) and the Marine Strategy Framework Directive (MSFD) have a strong collaboration with the existing Habitats Directive, Common Fisheries Policy, Water Framework Directive, and other relevant legislation<sup>9</sup>. From the general policy perspective, the EU has changed its direction towards the management of aquatic systems by applying to more holistic and integrated policies in 2000s. The MSFD was adapted after the Water Framework Directive (2000/60/EC) in a way that they both have the ecosystem-based approach<sup>10</sup>.

It is also crucial to understand the importance of the Water Framework Directive (WFD) for its influence on the MSFD. EU's fresh water policy has significantly affected the content and structure of MSFD. WFD and MSFD are similar in terms of content, objectives, regulatory design and context while both of these directives are aiming to manage ecosystems. In that respect, the MSFD has followed the WFD for its ecosystem-oriented approach of EU's water resources<sup>11</sup>. It is also seen that other marine legislation in worldwide such as Oceans Act in USA, Australia or Canada have already followed the same route before the MSFD in order to protect and restore ecological quality by using the integrated ecosystem-based approach.

The MSFD constitutes a framework for the development of marine strategies in order to achieve 'good environmental status' by the year 2020 by using 11 qualitative descriptors in contrast to WFD which intends to achieve 'good ecological status' by 2015<sup>12</sup>. Both the MSFD and WFD use 'ecologically defined space' in a way that the MSFD employs 'marine region management' and the WFD employs 'river basin management' for the area of management. However, in some instances these two directives cover the same area and this overlap between these two directives bring about challenges for both river and marine

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<sup>9</sup> Elizabeth M De Santo, 'Environmental Justice Implications of Maritime Spatial Planning in the European Union' (2011) 35 *Marine Policy* 34, 34.

<sup>10</sup> Arantza Murillas-Maza and others, 'Programmes of Measures of the Marine Strategy Framework Directive: Are They Contributing to Achieving Good Environmental Status in the Mediterranean?' (2020) 161 *Marine Pollution Bulletin* 111715, 2.

<sup>11</sup> Laura Boicenco and others, 'Implementation of Marine Strategy Framework Directive in Romania' (2018) 19 *Journal of Environmental Protection and Ecology* 196, 196.

<sup>12</sup> Ángel Borja and others, 'Marine Management – Towards an Integrated Implementation of the European Marine Strategy Framework and the Water Framework Directives' (2010) 60 *Marine Pollution Bulletin* 2175, 2175–2176.



administrations within Member States<sup>13</sup>. For instance, these two directives are spatially intersecting in the coastal area. In the coastal area, the WFD extends to 1 nautical mile from the coastline whereas the MSFD includes all marine waters from the baseline of territorial waters to the 200 nautical miles in Exclusive Economic Zone<sup>14</sup>.

In line with the European Integrated Maritime Policy (IMP), the EU Common Fisheries Policy (CFP) in 2014 was reestablished as a new general framework to manage EU fisheries. In that respect, this initiative was regarded as an opportunity to incorporate the ecosystem-based approach to fisheries management. Within the new framework of CFP, the ecosystem-based approach is defined as the management of fisheries within ecological boundaries, the use of natural resources, while preserving the biological wealth and biological processes, by taking into account the knowledge and uncertainties of ecosystems<sup>15</sup>.

When we look at the structure of the MSFD as an official text, it includes three parts. The first part is about the Preamble which covers the importance of the marine environment, the threats to marine environment and the measures foreseen by the EU including ecological, political, legal elements and principles that are considered for the MSFD. The second part is the operative part that is separated into five chapters and the third part is covered by six annexes that inform Member States with standards and guidance<sup>16</sup>. The MSFD is implemented in all marine waters, seabed and subsoil of areas where Member States have and/or exercise jurisdictional rights. After legal transposition of the directive and designation of the competent Authority by the Member State (MS), MS must develop marine strategies for their marine waters by applying to

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<sup>13</sup> Kristen Ounanian and others, 'On Unequal Footing: Stakeholder Perspectives on the Marine Strategy Framework Directive as a Mechanism of the Ecosystem-Based Approach to Marine Management' (2012) 36 *Marine Policy* 658, 661.

<sup>14</sup> Borja and others (n 12) 2176.

<sup>15</sup> Raúl Pallezo and Richard Curtin, 'Confronting the Implementation of Marine Ecosystem-Based Management within the Common Fisheries Policy Reform' (2015) 117 *Ocean & Coastal Management* 43, 43.

<sup>16</sup> Lawrence 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, 36.



regional approach. These marine strategies should have a plan of action involving ‘preparation phase’ and ‘programme of measures’<sup>17</sup>.

The Marine Strategy Framework (MSFD) Directive includes a plan of action with defined responsibilities, obligations and a schedule for member states and the European Commission. Instead of adapting a directive which determines goals that are binding for member states, EU has left member states’ national authorities to choose the means to achieve their goals. EU has recognised the need for the flexibility of member states’ authorities to manage their specific conditions in different regions of Europe<sup>18</sup>. The MSFD allows freedom and power to the Member States for the implementation but this situation causes governance complications and different levels of conformity among Member States<sup>19</sup>. The MSFD provides power to Member States to implement the policy by fitting it into their national context in contrast to EU’s traditional policies which are sectoral and prescriptive. The nature of the MSFD poses “unique challenges to the EU governance system” and brings about difficulties for the practical implementation. In that respect, implementing ecosystem-based approach in the European seas by the MSFD is a serious challenge as well<sup>20</sup>.

## II. THE ECOSYSTEM-BASED APPROACH WITHIN THE MSFD

Ecosystem-based approach is an integrated way for the management that involves the whole ecosystem including the human beings. Its main aim is to maintain the ecosystem in a healthy and productive in a way that ecosystem services continue to provide human needs. Ecosystem-based approach means not only the management of species but especially the management of the system in a holistic way including the human activities. It can be described as a social-ecological system that the ecosystem services are closely linked to the social area (cultures, institutions etc.). On the other hand, social and political institutions are

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<sup>17</sup> Boicenco and others (n 11) 198.

<sup>18</sup> Juda (n 16) 35–36.

<sup>19</sup> Lucio Carlos Freire-Gibb and others, ‘Governance Strengths and Weaknesses to Implement the Marine Strategy Framework Directive in European Waters’ (2014) 44 *Marine Policy* 172, 172.

<sup>20</sup> Judith van Leeuwen and others, ‘Implementing the Marine Strategy Framework Directive: A Policy Perspective on Regulatory, Institutional and Stakeholder Impediments to Effective Implementation’ (2014) 50 *Marine Policy* 325, 326.



also evolved in relation with the environment. In that perspective, human interaction with environment can be explained as a two-way adaptive process<sup>21</sup>.

In the Marine Strategy Framework Directive (MSFD), it is explicitly indicated that ecosystem-based approach is the core part of its objectives (MSFD Article 1). MSFD employs the ecosystem-based approach to the management of human activities. By using the ecosystem-based approach, it is aimed to obtain good environmental status (GES) in oceans and seas. In the Preamble of MSFD, it is also stated that measures and actions taken for the MSFD should be based on ecosystem-based approach and also on the precautionary principle<sup>22</sup>. The MSFD is a “serious attempt by the EU to implement the ecosystem-based approach to marine management in its seas”. Ecosystems are playing dominant role in the MSFD with the concept of marine regions which are defined by the MSFD as “taking into account hydrological, oceanographic and biogeographic features” (MSFD 2008/56/EC, art3(2)) as opposed to geopolitical boundaries<sup>23</sup>.

The MSFD constitutes a framework for the Member States to take necessary measures to achieve or maintain ‘Good Environmental Status’ in the marine environment. The concept of environmental status in the MSFD is taken into account the structure and functioning of the marine ecosystems combined with natural physiographic, geographic and climate factors. One of the most crucial aspects of the MSFD is the provision of a holistic, functional approach in a way that initially it separates the ecosystem into functional objectives then it brings them together to support the integrity of the ecosystem<sup>24</sup>.

In the MSFD’s application of an ecosystem-based approach for the management of human activities, when the marine strategies are designed, it is accepted that marine ecosystems provide variety of benefits to people by the goods and services including the supply of seafood, medicinal plants, climate regulation, water purification etc. In addition to the benefits, the MSFD draws attention to the importance of the ecosystems as a whole for society. In general, the complex interactions between ecosystem services, human behaviour and well being are

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<sup>21</sup> De Santo (n 9) 34.

<sup>22</sup> Torsten Berg and others, ‘The Marine Strategy Framework Directive and the Ecosystem-Based Approach – Pitfalls and Solutions’ (2015) 96 *Marine Pollution Bulletin* 18, 18.

<sup>23</sup> Ounanian and others (n 13) 658.

<sup>24</sup> Ángel Borja and others, ‘Implementation of the European Marine Strategy Framework Directive: A Methodological Approach for the Assessment of Environmental Status, from the Basque Country (Bay of Biscay)’ (2011) 62 *Marine Pollution Bulletin* 889, 889–902.





emphasized in an ecosystem-based approach<sup>25</sup>. The MSFD aims to make a balance for the protection of environment while ensuring the sustainability of marine resources for future generations<sup>26</sup>.

While examining the ecosystem-based approach in the MSFD, it can be asserted that ‘Maritime Spatial Planning’ and ‘Adaptive Management’ are the most important tools of the MSFD in terms of policy implementation of ecosystem-based approach for marine management.

## 1. Maritime Spatial Planning

The MSFD is also recognised as the first attempt by the EU to apply for an ecosystem-based approach to the management of human activities to facilitate Member States to adopt specific management tools such as maritime spatial planning as a means to use the seas and oceans in a less conflicting manner. In that perspective, as the environmental pillar of the EU’s integrated maritime policy, it was anticipated that the MSFD would be useful to regulate offshore industries in general and the hydrocarbon, fishing and energy industries in particular<sup>27</sup>. Among the offshore industries, ‘Offshore Wind Farming’ is largely taken part within the context of the IMP and particularly maritime spatial planning because of the competition with other spatial demands for sea uses. Offshore wind farming competition with other sectors such as shipping, fisheries and especially marine protected areas has caused the development of maritime spatial planning intensely in some EU member states such as in Germany and Netherlands<sup>28</sup>.

The development of marine protected areas over the past few decades has brought about the evolution of spatial approaches for marine management. As a result of this trend, maritime spatial planning has received attention as a tool to improve decision-making. The EU has embraced maritime spatial planning as a mean to balance sectoral interests in order to achieve the sustainable use of marine resources in a compatible way with the EU Sustainable Development

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<sup>25</sup> Bertram and Rehdanz (n 8) 27.

<sup>26</sup> Daniel Norton and Stephen Hynes, ‘Valuing the Non-Market Benefits Arising from the Implementation of the EU Marine Strategy Framework Directive’ (2014) 10 *Ecosystem Services* 84, 85.

<sup>27</sup> Long (n 2) 5.

<sup>28</sup> Malte Busch and others, ‘Consequences of a Cumulative Perspective on Marine Environmental Impacts: Offshore Wind Farming and Seabirds at North Sea Scale in Context of the EU Marine Strategy Framework Directive’ (2013) 71 *Ocean & Coastal Management* 213, 214.



Strategy<sup>29</sup>. The Maritime Spatial Planning (MSP) Directive<sup>30</sup> in the EU is applied in order to diminish conflicts between different sectors related to sea and to contribute for the development of networks of marine protected areas. MSP should be utilised in order to establish balance among sectoral policies with an integrative approach at the appropriate institutional level<sup>31</sup>. The integration principle has an important role in the MSP Directive by enabling the environmental protection concerns are integrated into other sectoral interests though decision-making process of marine regions.

It is also relevant to mention that there is a place for regional cooperation and coordination for activities between Member States and Third Countries sharing the same marine region both in MSFD and MSP<sup>32</sup>. Indeed, both of these two directives have the aim of establishing an operational framework to contribute for the coordinated decision-making process in order to achieve GES<sup>33</sup>.

## **2. Adaptive Management**

The MSFD establishes a science-driven process for environmental management by accepting that the status of marine ecosystems may change over time as a result of different patterns of human activities and different impacts of climate change. Therefore, the directive is designed to take into account scientific and technological development and attempted to become flexible to various threats and pressures caused by human activities<sup>34</sup>.

The complex interactions of the biophysical and human components of an ecosystem are taken into consideration by the ecosystem-based approach. In order to achieve this aim, adaptive management is used as a kind of management cycle for the ecosystem-based approach. The DPSIR (Driver-Pressure-State-Impact-Response) framework as an adaptive management cycle has been initially applied by the European Environment Agency (EEA) to make

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<sup>29</sup> De Santo (n 9) 35.

<sup>30</sup> The Maritime Spatial Planning Directive (2014), 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, Official Journal of the European Union.

<sup>31</sup> José Guerreiro and others, 'Governance Prospects for Maritime Spatial Planning in the Tropical Atlantic Compared to EU Case Studies' (2021) 123 *Marine Policy* 104294, 6–9.

<sup>32</sup> Vincenzo Maccarrone and others, 'An Italian Proposal on the Monitoring of Underwater Noise: Relationship between the EU Marine Strategy Framework Directive (MSFD) and Marine Spatial Planning Directive (MSP)' (2015) 118 *Ocean & Coastal Management* 215, 216.

<sup>33</sup> *ibid* 219.

<sup>34</sup> Long (n 2) 12.



assessments of the European Environment then it has been proposed to use for the MSFD. Stages in the DPSIR cycle can be observed and measured by using their set of indicators and then it informs environmental management to consider responses<sup>35</sup>.

There are different kinds of responses are observed in environmental management. A medium response is regarded as acting at the pressure (P) level. In medium response, legal limits to emissions, effective maritime spatial planning can be given as an example and this kind of response is defined as ‘implementation of the precautionary principle’. In that situation, by applying to the precautionary principle strictly, “a human activity is only allowed when it can demonstrate that it does not have an impact on the natural system”. In the case of weak management response, it means acting at the state (S) level, such as “trying to preserve the ecosystem state in designated protected areas through isolation from manageable pressures”. This kind of weak response is called as ‘implementation of evidence-based management’. By applying to the 11 descriptors of the MSFD, The EU Commission mainly takes into account the pressure (P) and state (S) stages of the DPSIR framework. Indicators used to implement MSFD can be explained under this conceptual view and it is basis of the ecosystem-based approach in the MSFD<sup>36</sup>.

DPSIR model’s terms have formed the standard way of thinking within the MSFD and its conceptualization is applied in Commission decisions, in the updated directive etc<sup>37</sup>. The MSFD mainly concentrates on the assessment and monitoring for the functioning of marine ecosystems. By this way, EU Member State should ensure that there are no significant risks related to marine ecosystems, human health or the use of the sea<sup>38</sup>.

The Member State should arrange monitoring programmes as indicated by the Article 11 of the MSFD in order to provide that GES is enabled. These monitoring programmes should apply to indicative characteristics, pressures, and

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<sup>35</sup> Berg and others (n 22) 19.

<sup>36</sup> *ibid.* 20.

<sup>37</sup> Emma Verling and others, ‘Application of a Risk-Based Approach to Continuous Underwater Noise at Local and Subregional Scales for the Marine Strategy Framework Directive’ (2021) 134 *Marine Policy* 104786, 2.

<sup>38</sup> Rachel Shucksmith and others, ‘Regional Marine Spatial Planning-The Data Collection and Mapping Process’ (2014) 50 *Marine Policy* 1, 2–3.



impacts listed in Annex III of the MSFD<sup>39</sup>. Gathering of data for monitoring programmes to achieve consistent GES assessments is needed for coordination. Moreover, the Member States and the European Commission that have duties for the MSFD implementation have the difficulty of adapting the concepts, methods and tools developed for the MSFD<sup>40</sup>. The concept of adaptive management mentioned in the MSFD could assist both EU Member States and neighbouring countries to overcome problems relating to the coordinated implementation of this directive by redefining GES and other related targets with increasing scientific knowledge<sup>41</sup>.

### **III. THE COORDINATION AND COOPERATION STRUCTURE FOR THE ECOSYSTEM-BASED APPROACH IN THE MSFD**

In terms of EU governance system, competences and responsibilities related to marine management are shared between the European Commission at the supranational level and the Member States both horizontally and vertically. At the supranational level, there are 18 Directorate Generals of the European Commission playing active role in marine management such as the Directorate General Environment for marine protection, the Directorate General Energy for the promotion of renewable energy. Secondly, as the vertical division of power between the EU and the Member States, there are varying competencies between the Commission and Member States. In that respect, for instance in fisheries management, there are shared competencies between the EU and Member States. For the MSFD, Member States have the responsibility to define good environmental status for regional seas, to develop programs of measures and to ensure transnational coordination with other neighbouring states within one marine region. The role of the European Commission is restricted only for coordination and controlling duties to a large extent<sup>42</sup>.

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<sup>39</sup> Nikolaos Zampoukas and others, 'Marine Monitoring in the European Union: How to Fulfill the Requirements for the Marine Strategy Framework Directive in an Efficient and Integrated Way' (2013) 39 *Marine Policy* 349, 349.

<sup>40</sup> Andreas Palialexis and others, 'Monitoring Biodiversity for the EU Marine Strategy Framework Directive: Lessons Learnt from Evaluating the Official Reports' (2021) 128 *Marine Policy* 104473, 12.

<sup>41</sup> Marianna Cavallo and others, 'Benefits and Impediments for the Integrated and Coordinated Management of European Seas' (2017) 86 *Marine Policy* 206, 212.

<sup>42</sup> Nina Maier, 'Coordination and Cooperation in the European Marine Strategy Framework Directive and the US National Ocean Policy' (2014) 92 *Ocean & Coastal Management* 1, 2.



The MSFD requires a regional approach for the management of European oceans and seas while developing marine strategies. Since regional approach is the key element for management, there is a need for cooperation between Member States and the coordination with third countries that are neighbouring in the same region. The need for coordination between the states is derived from the fact that states not only share goods and services but also the challenges to obtain Good Environmental Status (GES). To obtain GES within the different marine regions or sub-regions of the EU, marine strategies of the states should be consistent with each other<sup>43</sup>.

The MSFD puts existing regional institutional cooperation mechanisms into a place such as Regional Sea Conventions however, it involves neither specific legal framework nor governing structures to enable cooperation therefore enabling regional cooperation is highly difficult for MSFD implementation for both Member States that may have different priorities and neighbouring third countries that do not apply to the MSFD<sup>44</sup>.

Four marine regions are arranged in the MSFD namely, the Baltic Sea, the North Eastern Atlantic Ocean, the Mediterranean Sea and the Black Sea. By the MSFD, Member States are required to make cooperation and coordination with the third states sharing the same marine region through four regional sea conventions in Europe (the Helsinki Convention in the Baltic, the OSPAR Convention in the North Eastern Atlantic, the Barcelona Convention in the Mediterranean, the Bucharest Convention in the Black Sea). They are the main mechanisms to achieve cooperation and coordination as ecosystem-based approach requires for the protection of marine environment<sup>45</sup>. It is important to remember that the requirement of regional coordination and cooperation by using the mechanisms of Regional Sea Conventions is a “unique feature of the MSFD and an innovative concept in EU marine legislation”<sup>46</sup>.

In order to protect marine environment, the cooperation structures of four regional sea conventions in Europe aim to bring neighbouring countries that

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<sup>43</sup> Juan Bellas, ‘The Implementation of the Marine Strategy Framework Directive: Shortcomings and Limitations from the Spanish Point of View’ (2014) 50 *Marine Policy* 10, 11.

<sup>44</sup> Luc van Hoof, Astrid Hendriksen and Helen J Bloomfield, ‘Sometimes You Can Not Make It on Your Own; Drivers and Scenarios for Regional Cooperation in Implementing the EU Marine Strategy Framework Directive’ (2014) 50 *Marine Policy* 339, 339.

<sup>45</sup> van Leeuwen and others (n 20) 327.

<sup>46</sup> van Leeuwen, van Hoof and van Tatenhove (n 5) 636.



share marine region together. They are the platforms for information exchange and in some instances some policies can be adopted if they are compatible with national practices of the states. The achievement of cooperation and coordination by using the existing institutional mechanisms of regional sea conventions are difficult even for the EU Member States that need to implement good environmental status in regional sea. The MSFD could not provide a clue for how to organise coordination and cooperation between Member States and other participant countries at the level of the marine region<sup>47</sup>.

#### **IV. DISCUSSION**

The ‘Europeanisation’ process in the EU can help us to examine for how Member States’ are affected by the EU in terms of their environmental policy process. ‘Europeanisation’ process is defined by many scholars in various ways. Stephen George<sup>48</sup> defines Europeanisation briefly as “the impact on domestic politics and policy-making of membership of the European Union”. Bulmer and Burch<sup>49</sup> explain Europeanisation in a more complex way as a means to “characterise the impact of the European integration process upon the national level and specifically upon the domestic institutions of government”.

Similarly, Bulmer and Radaelli<sup>50</sup> define Europeanisation as a set of policy processes. These policy processes include a) construction of policy (policy formulation) b) diffusion of values and beliefs and, finally c) institutionalisation of formal and informal rules, policy paradigms and so on in political structures and public policies (putting policy into practice). In addition to these scholars, Bomberg and Peterson<sup>51</sup> explain Europeanisation as a two way process. According to their explanation, European integration affects ‘domestic policies (environmental policy etc.), politics (national political discourse) and polities (national institutions), while at the same time member states are also tending to affect Europeanisation process for their national interests.

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<sup>47</sup> Jan van Tatenhove and others, ‘Regional Cooperation for European Seas: Governance Models in Support of the Implementation of the MSFD’ (2014) 50 *Marine Policy* 364, 365–371.

<sup>48</sup> Stephen George, ‘The Europeanisation of UK Politics and Policy-Making the Effect of European Integration on the UK’ (2001) 8 *Queen’s Papers on Europeanization* 1.

<sup>49</sup> Simon Bulmer and Martin Burch, ‘Coming to Terms with Europe: Europeanisation, Whitehall and the Challenge of Devolution’ (2000) 9 *Queen’s Papers on Europeanization* 2.

<sup>50</sup> Simon Bulmer and Claudio Radaelli, ‘The Europeanisation of National Policy?’ (2004) 1 *Queen’s Papers on Europeanization* 4.

<sup>51</sup> Elizabeth Bomberg and John Peterson, ‘Policy Transfer and Europeanization: Passing the Heineken Test?’ (2000) 2 *Queen’s Papers on Europeanization* 2.



The study of Liefferink and Jordan<sup>52</sup> on the Europeanisation of national environmental policies of member states helps us to examine the effects of Europeanisation. As Liefferink and Jordan claim, the Europeanisation process mainly affects the ‘substance of national policies’ of member states including their policy instruments, standards and so on. However, national political institutions and their working styles generally remain intact from the effects of Europeanisation. In that respect, Liefferink and Jordan<sup>53</sup> state that although some influence is being observed on the content of national policies, the member states’ policy style seems ‘not to have changed’. As an example for policy style, the preventative approach defended by Europeanisation process has hardly influenced the member states that have traditionally reactive style.

It can be argued that the integration principle which is placed in maritime spatial planning and the precautionary principle which is placed in adaptive management are the most important principles for the implementation of ecosystem-based approach in the MSFD. In order to achieve GES in line with the ecosystem-based approach, these two principles should be applied effectively by the national authorities. As Europeanisation process literature indicates, the implementation of the integration and the precautionary principles are mainly related to policy styles of member states, but the EU has generally limited effect on EU member states on the actual implementation of these principles in national policy level. This situation becomes even worsened when the regional cooperation comes into question with neighbouring countries in the same marine region.

## CONCLUSION

The Marine Strategy Framework Directive’s (MSFD) adoption in 2008 was regarded as the revolutionary legal framework in terms of its new approach for the protection of marine environment. The MSFD as a legal instrument was the complementary part of the EU’s Integrated Maritime Policy (IMP) in a way that while IMP aims to regulate economic and social dimensions, the MSFD aims to regulate environmental dimension of European seas. An ecosystem-based

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<sup>52</sup> Duncan Liefferink and Andrew Jordan, ‘An Ever Closer Union of National Policy? The Convergence of National Environmental Policy in the European Union’ (2002) 10 Queen’s Papers on Europeanization 3.

<sup>53</sup> Duncan Liefferink and Andrew Jordan, ‘The Europeanisation of National Environmental Policy: A Comparative Analysis’ (2002) 14 Working Paper Series 10.



approach can be described as the most innovative aspect of the MSFD in order to obtain good environmental status (GES).

However, implementation of ecosystem-based approach is a hard task for EU governance system. The MSFD mainly gives the authority to member states to implement relevant policies by applying to their national context. In that respect, the policy styles of member states are very important for the implementation of the ecosystem-based approach in the MSFD. The two main policy tools of the ecosystem-based approach can be described as Maritime Spatial Planning and Adaptive Management. The integration principle for Maritime Spatial Planning and the precautionary principle for Adaptive Management are formed as the basis for the implementation of the ecosystem-based approach.

Although these two principals have been transposed into the environmental legislation of the member states, there are differences exist among the member states in implementation stage. The Europeanisation process has shed light on the variety of the member states' policy styles in the EU. It can be evinced that although the EU member states have been experiencing to apply these principles formally since the Maastricht Treaty, the limited effects of Europeanisation process on member states' policy styles can bring about differences during the policy implementation phase.

Moreover, the neighbouring countries in the same marine region that are not familiar to these principles would implement these policy tools in a different manner as well. These differences eventually would influence the implementation of Maritime Spatial Planning and Adaptive Management negatively as the two important policy tools of ecosystem-based approach in a way that there is need for coordination and cooperation to obtain GES in marine regions between member states and neighbouring countries.

The existing mechanism of the MSFD by applying to regional sea conventions could not provide a solution in establishing an effective coordination and cooperation structure for member states and neighbouring countries to implement these policy tools in a collective way. Because of that reason, the ecosystem-based approach in the MSFD should be supported by a new structure to enable more effective coordination and cooperation mechanism for both EU member states and neighbouring countries to overcome differences in policy styles for their common approach towards the integration and precautionary principles.



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