VI.1.4
THE EUROPEAN UNION AND SEABED MINING

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Introduction

The destruction suffered across Europe due to centuries of conquests and wars, particularly those that were inflicted during the Second World War, eventually gave birth to a strong desire to foster peace and mutual benefit across the borders of the European powers. The integration process that culminated in the formation of the European Union (EU) and its present form can be traced back to the creation of the European Coal and Steel Community (ECSC) by six countries (Belgium, France, West Germany, Italy, Luxembourg and The Netherlands) in 1951. Intended as an instrument to create a common market for two critical commodities, coal and steel, the concept evolved into the establishment of a broader common market to facilitate greater economic development through the setting up of the European Economic Community (EEC) in 1957. The EEC aimed to create an internal market without borders characterized by the free movement of people, goods, services and capital. To achieve this goal, common policies were established, in particular the common agricultural policy which, from 1970, included fisheries. Over the years, membership of the EEC grew along with the ambition to expand cooperation beyond economic or trade matters.

The Single European Act of 1986 marked a first transformation of the EEC towards a cooperation that was not exclusively economic. This aspiration was subsequently manifested through the 1991 Maastricht Treaty on the European Union. Thereafter followed a very clear acceleration of the enlargement of the EU, which imposed new revisions of the treaties (through the 1997 Treaty of Amsterdam and 2011 Treaty of Nice). The rejection of the European Constitution in 2005 finally encouraged the Member States (MS), after very long and difficult discussions, to accept the last major modification of the original treaties to date. By absorbing the EEC and integrating it into the EU, the subsequent 2009 Lisbon Treaty profoundly adapts the rules of the original treaties to allow better coordination of the MS, now at a total number of 27 (after the recent departure of the UK or 'Brexit').

Interests over the maritime dimension and the EU's competences over the seas were thus not obvious in the evolution and early construction of the EEC. Attention over maritime areas in the EU evolved over the years. Since the introduction of fisheries policies in 1970 (recently reformed in 2014), the EU has continued to introduce important regulations, directives and policies that have gone beyond economic interests and aimed at a stronger marine environmental or conserva-

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tion focus. Growing interests in marine minerals among some MS adds an additional dimension to the economic potential of the marine space within and beyond the jurisdiction of the EU. While there seems to be a broad desire within the EU to secure marine minerals as a resource for future exploitation activities, an overarching conflict appears to be looming between the exploitation interests of certain MS and the wider interest of the EU in ensuring the protection of the marine environment. Consequently, and due to the relationship between the EU and its MS, seabed mining of mineral resources both in areas within the jurisdictions of its MS as well as beyond national jurisdiction (the Area) is presently a complex issue for the EU.

Geographical extent of the seabed within and beyond national jurisdiction

While normally covering the territorial sea and exclusive economic zone, this section will only consider the EU marine space comprising the continental shelf, both within and beyond 200 nautical miles of its 27 MS.[1] The resulting total seabed areas under jurisdiction of MS (including overseas territories)[2] extends to over 9 million square kilometres (km²) in terms of the continental shelf, and nearly 6 million km² with respect to the extended continental shelf if such claims are accepted.

MS have been particularly active in the extension of the continental shelf. The extended continental shelf submission by France, Ireland, Spain and the United Kingdom in the area of the Celtic Sea and the Bay of Biscay was the first joint submission presented to the Commission on the Limits of the Continental Shelf in May 2006. Since then, other submissions have been made by Denmark, France, Ireland, Portugal, Spain and the UK.[3] In total, France has made eight submissions and joint submissions (due to its overseas territories), followed by Denmark with five submissions (due to Greenland). As of December 2021, Denmark, France, Ireland, Portugal and Spain still have a total of 12 pending submissions at the Commission on the Limits of the Continental Shelf (including, for France, joint submissions with other non-MS in the Indian and Pacific oceans).

In case of areas beyond national jurisdiction, several MS either hold or sponsor exploration contracts granted by the International Seabed Authority (ISA) for two resource types: polymetallic nodules in the Clarion-Clipperton Zone (Belgium, Bulgaria, Czech Republic, France, Germany, Poland and Slovakia) and polymetallic sulphides in the Mid-Atlantic Ridge and in the Central Indian Ocean Basin (Poland, France and Germany). No MS currently holds or sponsors exploration contracts for cobalt-rich ferromanganese crusts.

Governance framework of the European Union

The EU is a unique and unrivalled international organization. It has indeed granted citizenships to the nationals of its MS and its legislation can also directly apply to entities and citizens.[4] In

1 Including the marine space of the overseas territories of the MS.

2 To understand the application of EU Law in the various overseas territories of the MS, see D. Kochenov, 'The application of EU law in the EU's overseas regions, countries and territories after the entry into force of the Treaty of Lisbon', *Michigan State Journal of International Law* 20, 2012, 668–743.

3 The UK was still a MS of the EU at the time of its submission.

4 The inability of the traditional category of 'international organization' under international law to reflect the reality of the practices of the EU have encouraged some scholars to reconsider the terminology used to describe the EU. See e.g. J.P. Jacqué, 'La spécificité de l'Union', *Droit institutionnel de l'Union européenne*, Dalloz: Paris, 2012, p. 117: 'si l'on additionne l'ensemble des spécificités de l'Union, on réalise que l'on est en présence d'un phénomène qui ne répond plus à la notion traditionnelle d'organisation internationale, sauf à donner à cette notion une extension telle qu'elle puisse couvrir toutes les formes d'organisations sociales qui ne sont pas étatiques'.

the EU, the MS have transferred a degree of authority, and to a certain extent, sovereignty and decision-making powers[5] to three EU institutions: the Parliament, the European Council[6] and the Commission. MS are only directly represented in the European Council, while the Commission and the Parliament act autonomously vis-à-vis national country interests. Given the importance of these three institutions in EU governance, it is necessary to introduce them in order to better understand their roles and functions.

The members of the Parliament are directly elected by voters in the MS, and they mainly act according to transboundary lines of political parties in the EU. The Commission is the only institution empowered to initiate legislation, which needs to be further approved by the European Council and Parliament. In the adoption of legislative acts, a distinction is made between the ordinary legislative procedure (co-decision), which brings Parliament on an equal footing with the European Council, and the special legislative procedures, which apply only in specific cases where Parliament has only a consultative role. The ordinary legislative procedure has actually become the main legislative procedure on a wide range of areas limiting the powers of the MS since the Parliament does not represent the interests of the MS, but the interests of the EU based on party politics. This is particularly important for understanding the position of the Parliament and the Commission regarding seabed mining, which can be in contrast to the policy of MS, as reflected in the European Council.

Environmental protection (land and marine) is one of those areas for which legislation is adopted jointly. Since the *1997 Treaty of Amsterdam*, this topic has been high on the political agenda owing to the integration of sustainable development into the objectives of the EU (Art. 2 TUE). Its importance is further confirmed by Title XX of the *2007 Treaty on the Functioning of the European Union* (TFEU), dedicated to the environment, and more specifically by article 191 (1) stating that the EU policy on the environment shall, *inter alia*, pursue the preservation, protection and improvement of the quality of the environment, a prudent and rational utilization of natural resources, and promote measures at international level to deal with regional or worldwide environmental problems. The principle of precaution and the polluter pays principle is also at the heart of the TFEU[7] and thus has to be applied by the EU institutions, as well as by the MS. Finally, and especially within the context of seabed mining, it should be noted that the EU, in the elaboration of its environmental policy, shall take into account available scientific and technical data, environmental conditions in the various regions of the EU, the potential benefits and costs of action or lack of action, and the economic and social development of the EU as a whole, and the balanced development of its regions.[8] Although not included into the TFEU, the ecosystem approach also has a significant place in the EU marine legal framework.[9]

On top of these 'internal' EU competences based on the system of competence sharing with its MS, the EU also has 'external' competences as a party to international conventions, such as the *United Nations Convention on the Law of the Sea* (UNCLOS) and its three implementing agree-

5 Which can take the form of MS transferring exclusive competence to the EU or the EU having shared competence with MS.

6 The European Council is not to be confused with the Council of Europe, an international organization comprising 46 countries of Europe, set up to promote democracy and protect human rights and the rule of law in Europe.

7 Article 191 (2), TFEU.

8 Article 191 (3), ibid.

9 See for example, Directive 2008/56/EC (the EU Marine Strategy Framework Directive), Articles 3.4 and 3.5, Article 10 and Annexes I and IV, Regulation No 1380/2013 (the EU Common Fisheries Policy), Article 2.3, and Directive 2014/89/EU (the EU Marine Spatial Planning Directive), Article 5.

ments, all major multilateral environmental agreements and their protocols, such as the *Convention on Biological Diversity*, the *United Nations Framework Convention on Climate Change* and regional seas conventions covering the EU marine space.[10] As such, the EU has the same treaty obligations comparable to the other State Parties, including its own MS (the so-called mixed treaties). Consequently, rights and obligations covered by these conventions have become part of the EU competence and legislative power, next to the powers of the MS parties. This duality between internal and external competences often leads the EU, as a contracting party, to play an active role in the implementation of these conventions.[11] In this respect, the EU takes the lead to harmonize the national legislation of its MS by adopting EU legislation, such as regulations (binding act to be applied in its entirety and with direct effect in the national legislation) or most commonly through directives that need to be transposed into national legislation (binding act setting out a goal to achieve by the MS, but the MS remain free to decide how to do it).

Upon ratification of the UNCLOS, the EU has deposited a declaration of competences[12] stating its exclusive competence on matters relating to the conservation and management of fishing resources, and shared competence with its MS on matters relating to maritime transport, safety of shipping and prevention of pollution.[13] For the seabed beyond national jurisdiction of the MS, the EU has exclusive competence only on aspects relating to international trade arising out of seabed mining in the Area, by virtue of its commercial and customs policy. All other aspects related to the ISA regarding the management and protection of the Area and its resources are subject to a coordination mechanism between the EU and the MS.[14] Such coordination aims to improve the status of the EU as an international organization,[15] while accounting for the complex interaction dynamics between the national positions of each MS.

European Union regulatory framework applicable to seabed mining

Seabed mining on the continental shelf of Member States

Given the absence of specific EU legislation on the matter, seabed mining activities on the continental shelf (including the extended continental shelf) fall within the competence of the MS.[16] although, in case of environmental effects of those activities, the MS have to apply existing EU legislation to protect the marine environment and to conserve certain marine biological resources. Most of these legislations find their roots in international instruments which have been transposed into EU law. Particularly relevant for seabed mining are the conventions of the United Nations

10 Namely, the North East Atlantic Ocean, Mediterranean Sea and the Baltic Sea, which will be discussed below.

11 Even in some cases where the EU is not a party to the conventions, such as the IMO conventions: see N. Liu and F. Maes, 'The European Union and the International Maritime Organization: EU's external influence on the prevention of vessel-source pollution', *Journal of Maritime Law and Commerce*, 2010, 581–594.

12 UN Treaty Collection, UNCLOS – Declarations and Reservations: European Union. Available online <https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXI-6&chapter=21&Temp=mtdsg3&clang=_en> (accessed 22 December 2021).

13 Council Decision concerning the conclusion by the European Community of the United Nations Convention of 10 December 1982 on the Law of the Sea and the Agreement of 28 July 1994 relating to the implementation of Part XI thereof, 98/392/EC, 23 March 1998. See in particular Annex II.

14 Article 2, ibid.

15 The EU is an observer to the Council of the ISA, not a member. It has therefore no voting rights and therefore relies on MS to express and upheld its position within.

16 F. Arnesen, R. Greaves and A. Pozdnakova, 'European Union law and the seabed', in Catherine Banet (ed.), *The law of the seabed: access, users, and protection of the seabed*, Leiden: Brill Nijhoff, 2020, pp. 321–323.

Economic Commission for Europe, such as the *1991 Convention on Environmental Impact Assessment in a Transboundary Context* (Espoo Convention) and its 2003 Protocol on Strategic Environmental Assessment (Kiev Protocol),[17] and the *1998 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters* (Aarhus Convention).[18]

As clarified earlier, the environmental consequences and the measures to be taken in order to protect the marine environment from seabed mining are also based on EU legislation and are a shared competence.[19] The *Convention on Biological Diversity* is at the EU level partly implemented by the Birds Directive,[20] the Habitats Directive[21] and the Marine Strategy Framework Directive,[22] among others. The Habitats Directive aims to ensure biodiversity through the conservation of natural habitats[23] and species of wild fauna and flora of 'community interest' in the 'European territory of the MS to which the Treaty applies' (art. 2.1) by maintaining or restoring those habitats and species at a favourable conservation status (art. 2.2). The European Court of Justice confirmed that the Habitats Directive applies beyond the territorial waters of MS,[24] in so far as the MS or the EU exercise sovereign rights there, which was already existing state practice. It is therefore directly applicable on the continental shelf whereby the MS have sovereign rights according to art. 77 of UNCLOS. In particular, the Habitats Directive protects reefs and sea mammals as well as other habitats and species[25] that may be affected by seabed mining.[26] The Habitats and Birds Directives require MS to designate protected areas, respectively Special Areas of Conservation[27] and Special Protection Areas that form an ecological network called 'Natura 2000' under the Habitats Directive.[28] This network enables the natural habitat types and the spe-

17 1991 Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), 1989 U.N.T.S. 309; and 2003 Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (Kiev Protocol), 2685 U.N.T.S. 140. The Kiev Protocol has been transposed into EU legislation by the 2001 Strategic Environmental Assessment Directive.

18 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), 2161 U.N.T.S. 447. The Aarhus Convention has been transposed into EU legislation by Directive 2003/4 on public access to information (first pillar) and Directive 2003/35 on public participation (second pillar).

19 Fisheries, the protection of fishing grounds and the conservation of marine biological resources of the sea under the EU fisheries policy is however an exclusive competence of the EU. See for example case Case 804/79, *Commission v United Kingdom* [1981] para. 18, ECLI:EU:C:1981:93.

20 Directive 79/409/EEC, amended in 2009 by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.

21 Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

22 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.

23 Article 1.1 'Natural habitats means terrestrial or aquatic areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural', Habitats Directive.

24 Case C-06/04, *Commission v United Kingdom* [2005], paras. 114 and 117, ECLI:EU:C:2005:626; see other EU case law in Arnesen, Greaves and Pozdnakova, op. cit., pp. 318 and 321.

25 Habitat Directive, Annex IV, where a strict protection regime must be applied across their entire natural range within the EU, both within and outside Natura 2000 sites.

26 ECORYS and MRAG, *Study to investigate state of knowledge of deep sea mining*, Final Report, Annex 2, 2014, p. 42. Available online <https://webgate.ec.europa.eu/maritimeforum/system/files/Annex%202%20Legal%20analysis_rev_1.pdf.> (accessed 21 March 2022). For EU habitats to be protected see European Commission, *Interpretation Manual of European Union Habitats*, April 2013.

27 Habitats Directive, Annex I and Annex II.

28 In the marine environment these are also called Marine Protected Areas (MPAs) in and beyond this particular EU context.

cies' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. To do so, MS need to avoid the deterioration of the special areas of conservation and the disturbance of their related species and may not adversely affect the integrity of the site. Proposed projects or plans concerning activities that are likely to have a significant effect on the site, whether in the site or outside, require an appropriate assessment. In case of a negative impact of seabed mining on the special areas of conservation, the activity can only be carried out for imperative reasons of overriding public interest and if compensation measures are taken to protect the overall coherence of the Natura 2000 networks.

To protect the marine biodiversity from the harmful effects of seabed mining in the EU (territorial sea, exclusive economic zone and continental shelf, including beyond 200 nm[29]), the 2008 Marine Strategy Framework Directive (MSF Directive)[30] is relevant. Its objective is to achieve a good environmental status (GES) of the EU marine waters by 2020,[31] with focus on the Baltic Sea, the North-East Atlantic Ocean, the Mediterranean Sea and the Black Sea. To achieve GES by 2020, each MS had to develop a strategy for its marine waters, which must be kept up-to-date and reviewed every six years. The strategy includes an initial assessment of the current environmental status of national marine waters, the establishment of environmental targets and associated indicators to achieve GES, the establishment of a monitoring programme for the assessment and the regular update of targets, and the development of a programme of measures designed to achieve or maintain GES, based on new criteria set out by the Commission in 2017 and indicative elements for the preparation of the marine strategies.[32] By doing so, the MSF Directive implements the obligation under UNCLOS to prevent, reduce and control pollution, including pollution of the seabed and subsoil, through the observation and measurement of risks or effects of pollution.[33] The new EU Biodiversity Strategy for 2030[34] further strengthens the protection of marine and seabed ecosystems and efforts to restore them to achieve GES.[35] To do so, it strives for the expansion of

29 See the interpretation of the geographical scope of the directive in the following document. EU Commission Staff Working Group, *Background document for the marine strategy framework directive on the determination of good environmental status and its links to assessments and the setting of environmental targets*, SWD (2020) 60 final and SWD (2020) 61 final, 25 June 2020.

30 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 (Marine Strategy Framework Directive). Moreover, as noted in the recent MSF Directive implementation report in 2020, 'analysing seabed integrity and analysing the entire food webs are novel approaches that are largely driven by the requirements of MSFD'. Report from the Commission to the European Parliament and the Council on the implementation of the MSF Directive, COM(2020) 259 final, 25 June 2020.

31 'Including 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'. MSF Directive, Article 3(1)(a).

32 It has been noted that 'in the case of seabed mining, where environmental impacts can only [be] estimated, owing to the many environmental and biodiversity unknowns, a precautionary approach, including the use of GES descriptors is essential in all commercial activities'. See ECORYS and MRAG, *Study to investigate state of knowledge of deep sea mining*, Interim Report, 2014, p. 128. Available online <https://webgate.ec.europa.eu/maritimeforum/sites/default/files/FGP96656%20DSM%20Interim%20report%20280314.pdf> (accessed 21 March 2022).

33 MSF Directive, preamble para. 17: 'The Community and its Member States are each parties to [UNCLOS and the 1994 Implementing Agreement]. The obligations of the Community and its Member States under those agreements should therefore be taken fully into account in this Directive'.

34 European Commission, *EU Biodiversity Strategy for 2030: Bringing nature back into our lives*, COM(2020) 380 final, 20 May 2020.

35 See the EU Nature Restoration Plan by 2030, commitment 13, 'The negative impact on sensitive species and habitats, including on the seabed through fishing and extraction activities, are substantially reduced to achieve good envi-

protected areas and the establishment of strictly protected areas for habitats and fish stocks recovery, and tackles practices that damage the seabed. Overall, the MSF Directive can be relevant to assess the effects of seabed mining towards the achievement of GES but does not appear to have the ambition nor the tools to restrict seabed mining as such.

The Environmental Impact Assessment (EIA) Directive[36] is one of the oldest EU environmental legislations. Together with the Strategic Environmental Assessment (SEA) Directive,[37] they apply, in a complementary way, to seabed mining activities on the continental shelf of MS. Indeed, the EIA Directive requires MS to assess significant environmental effects of public and private projects before permitting them, *ex-ante*, and initiate a process of public participation while the SEA Directive has the same objective, but limited to plans and programmes (for e.g. maritime spatial plans)[38] which are likely to have a significant effect on the environment in the MS.[39] The EIA Directive furthermore distinguishes between projects subject to a mandatory EIA (Annex I) and other projects (Annex II) which are subject to an EIA as determined by the MS according to specific selection criteria laid down in Annex III. Projects for which an EIA[40] indicates that significant effects might take place[41] mostly require adjustments from the original project in order to reduce or minimize those effects. In the case of seabed mining of mineral resources, only Annex II of the EIA Directive seems relevant owing to the category of 'extraction of minerals by marine or fluvial dredging'.[42]

It is evident that the SEA and EIA Directives complement each other. For instance, plans and programmes under the SEA Directive relate to EIA projects to be undertaken in the future and for which the plan or programme forms the legal basis. Likewise, other plans and programmes that are due to legislative, regulatory or administrative requirements can trigger the necessity to conduct a SEA. This is *inter alia* the case with management plans pursuant to Natura 2000 areas. Furthermore, if plans or programmes are not listed in the SEA Directive,[43] the MS anyhow has to carry out a screening procedure in order to understand if these plans or programmes do have

ronmental status'. Restoration efforts are to be undertaken through legally binding EU restoration targets, which, for some, are built on relevant legislations such as the Habitats and the MSF Directives. The legislative proposal setting binding nature restoration targets was due to be presented in December 2021 but was postponed until further notice.

36 Directive 85/337/EEC of the European Council 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (revised via Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 in amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment).

37 Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.

38 Means plans and programmes including those co-financed by the EU, as well as any modification to them. See Article 2 (a), SEA Directive.

39 Recital 4, SEA Directive. For criteria determining the likely significance of effects, see Annex II therein.

40 The EIA shall describe and assess the direct and indirect effects of a project on: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape; (e) the interaction between the factors referred to in points (a) to (d). See Art. 3, EIA Directive. See also Annex IV of the same for references to noise, vibration and light, which are all relevant for seabed mining.

41 The likely significant effects of projects take into account the magnitude and spatial extent of the impact, its direct and transboundary nature, its intensity and complexity, its probability, expected onset, duration, frequency and reversibility, the cumulation of the impact with the impact of other existing and/or approved projects and the possibility of effectively reducing the impact. Annex III, EIA Directive.

42 Annex I only includes the case of the extraction of petroleum and natural gas, not the extraction of mineral resources. See Annex I (14), EIA Directive, ibid.

43 Article 3 (3), SEA Directive.

significant effects on the marine environment.[44] If they do, then the SEA Directive also applies.[45] In case seabed mining is part of a plan or programme or is considered by the MS as a plan or programme likely to have significant effects on the marine environment (which seems obvious in the case of seabed mining), the SEA Directive will thus apply and trigger the necessary consultation procedures with other MS (between relevant authorities, the public, neighbouring states whose environment is likely to be affected).[46]

Seabed mining in the Area

In addition to applicable regulatory framework under UNCLOS as well as subsequent rules, regulations and procedures developed by the ISA, MS carrying out or sponsoring persons and entities with respect to seabed mining activities in the Area are also subject to EU laws that may apply extra-territorially. The identification of the applicable legislation, however, reveals important uncertainties in the EU framework applicable on the seabed beyond national jurisdiction.

The Habitats Directive, for its part, appears to be rather straightforward. Since it is only applicable to areas within the jurisdiction of MS where they have sovereign rights,[47] it clearly excludes its implementation to the Area (and the High Seas). The MSF Directive on its side applies to the 'marine waters of MS', which includes the seabed and subsoil 'to the outmost reach of the area where a Member State has and/or jurisdictional rights, in accordance with UNCLOS'.[48] It thus applies to maritime zones within jurisdiction and, as mentioned by a working group of the EU Commission, to 'other types of jurisdictional designation'.[49] While the geographical coverage of the MSF Directive is firmly anchored in EU marine space, the application of the ecosystem approach together with concept of jurisdiction could allow the extension of the scope of application of this directive beyond the strict EU marine space. It should, however, be noted that jurisdictional issues are defined by each MS who decides where the MSF Directive applies. As a result, the question of implementation of the MSF Directive under the flag State jurisdiction could therefore be proposed by an MS undertaking exploration or future exploitation activities in the Area.

The EIA or SEA Directives offer interesting implementation mechanisms. They apply to public or private projects (EIA Directive), to plans and programmes (SEA Directive) which have significant effects on the marine environment, and they both integrate the notion of transboundary effect. While the scope of the EIA Directive does not explicitly exclude its application to projects in the Area, the reference to the notion of 'territory' and the expression 'significant effects on the environment in another Member States' in article 7, however, cast important doubts on its suitability for seabed mining in the Area. The same applies to the SEA Directive which uses the same expression in Recital 4 'significant effects on the environment in the Member States' while, however, restricting the transboundary consultation upon other MS (and thus not requiring transboundary

44 MS shall then take into account the criteria set out in Annex II. Art. 3 (4), ibid.

45 For more information on the scope and implementation of the SEA Directive, see European Commission, *Report from the Commission to the Council and the European Parliament under Art. 12 (3) of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment*, COM(2017) 234 final, 15 May 2017.

46 ECORYS and MRAG, op. cit. at pp. 101–102.

47 See again, Case C-06/04, *Commission v United Kingdom* [2005], para. 114 and 117, ECLI:EU:C:2005:626; and other EU case law in Arnesen, Greaves and Pozdnakova, op. cit., pp. 318 and 321.

48 Article 3 (4) which refers to the definition of point (1) a) of Directive 2008/56/EC and coastal waters defined by point 7 of Article 2 of Directive 2000/60/EC and their seabed and subsoil.

49 SWD (2020) 60 final and SWD (2020) 61 final, op. cit.

consultation with non-MS countries, such as those conducting activities in the Area). The implementation of these two Directives in the Area, as they are, therefore appears very unlikely.

In view of the potential ratification by the EU, and subsequent entry into force, of the *Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction* (the BBNJ Agreement), these directives might be amended.[50] Changes into EU law will anyhow be made to allow MS to comply with their future obligation to ensure the assessment of planned activities in areas beyond national jurisdiction. To this end, a mechanism of extra-territorial implementation through the flag State jurisdiction and control of MS could be introduced. With regard to thresholds and factors for the conduct of EIA and SEA, MS and the EU are allowed to maintain their own thresholds and standards, if these are equivalent or below the thresholds for EIA set under the BBNJ Agreement.[51]

To this end, the thresholds for EIA and SEA Directives, at present based on the 'significant effects on the marine environment', may be revised to integrate the wording adopted under the BBNJ Agreement's EIA screening phase, namely, 'more than a minor or transitory effect on the marine environment or the effects of the activity are unknown or poorly understood'.[52] The BBNJ Agreement's thresholds for the mandatory conduct of EIA based on 'substantial pollution of, or significant *and* harmful changes to the marine environment' may also be introduced. More specifically to the SEA Directive, changes could also be made to align the Directive with the BBNJ Agreement, namely, replacing the assessment of *reasonable* alternatives[53] with the broader requirement of the BBNJ Agreement, consisting of the assessment of alternatives (without the reasonable component).[54]

Finally, given the possibility that MS can jointly apply to conduct or choose to co-sponsor mining activities in the Area with non-MS, more clarity is needed as such arrangements may lead to potential conflict whereby MS would need to comply with EU Directives and other EU requirements, whereas non-MS (which may also potentially not be parties to the forthcoming BBNJ Agreement) might not feel the need to comply in the same way. Indeed, there is an existing precedent in the case of the Interoceanmetal Joint Organization (IOM), which holds an exploration contract with the ISA for polymetallic nodules, and is jointly co-sponsored by six countries, of which four are MS (Bulgaria, Czech Republic, Poland and Slovakia) and two are non-MS (Cuba and Russian Federation).

The European Union, its Member States and regional seas conventions

Some MS, and the EU in its own right, are parties to three regional seas conventions that those MS and the EU would have to comply with and implement accordingly. These conventions, which are also pertinent for seabed mining activities, are the *1992 Convention for the Protection of the Marine Environment of the North-East Atlantic* (OSPAR Convention); the *1995 Convention for the*

50 The obligation to conduct an EIA under the BBNJ Agreement allows for the State Party to conduct EIA in accordance with the BBNJ Agreement or according to the Party's national process. Art. 28, *Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction*, June 2023. Hereinafter 'BBNJ Agreement'.

51 Article 29, para 4 b), BBNJ Agreement.

52 Article 30, para 1, see also para 2, ibid.

53 Article 5, SEA Directive.

54 Article 39, BBNJ Agreement, op. cit.

Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and Protocols; and the *1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area* (Helsinki Convention).

The OSPAR Convention

Eleven MS and the EU,[55] as well as Iceland, Norway, Switzerland and the UK, are parties to the OSPAR Convention.[56] The Convention covers the maritime area under national jurisdiction of the parties, but also extends to some parts that come under areas beyond national jurisdiction (ABNJ). One of the key obligations of the parties is the duty to apply the precautionary principle, but this duty is limited to substances and energy introduced in the marine environment that can, *inter alia*, harm living resources and marine ecosystems.[57] From a textual interpretation it seems that this precautionary principle does not cover all potential environmental impacts of seabed mining, which include *inter alia* suspended sediments, operational and discharge plumes, noise and vibrations.[58] Nevertheless, the parties can, individually or jointly, take more stringent measures with respect to the protection of the maritime area against the adverse effects of human activities.[59] They even have an obligation to 'take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected'.[60]

The Convention is supplemented by five annexes. Despite its title, Annex III on the prevention and elimination of pollution from offshore sources does not apply in the case of seabed mining.[61] Only Annex V on the protection and conservation of the ecosystems, habitats, species and biological diversity of the OSPAR area is relevant for sea mining. In order to protect and conserve ecosystems and biological diversity of the OSPAR area,[62] marine protected areas (MPAs) have been designated in legally binding OSPAR decisions.[63] OSPAR MPAs are established with the aim to form an ecologically coherent network and to ensure their habitats and species are adequately protected against the adverse effects of human activities. Management measures that need to be taken in the MPAs are, however, adopted by recommendations which are not legally binding.[64] OSPAR

55 Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands, Portugal, Spain and Sweden.

56 The *1992 Convention for the Protection of the Marine Environment of the North-East Atlantic* (OSPAR Convention), 2354 U.N.T.S. 67.

57 Article 2(2)(a), OSPAR Convention.

58 OSPAR, *Feeder Report to the 2023 QSR*, 2021, paragraph 6.7 mentions as potential impacts of the extraction of non-mineral resources linked to seabed mining: 'loss of substrate; changes to seabed integrity; operational suspended sediment and chemical plumes; re-sedimentation from operational plume; discharge plume; increase in light; increase in noise levels and potential vibration; and release of sediment-bound or subsurface pore water toxic metals into the water column. Activities could also have impacts on other economic sectors, such as fisheries or the exploitation of biota for marine genetic resources. Understanding of the extent and nature of impacts is uncertain'.

59 Article 2(5), OSPAR Convention.

60 Article 2(1)(a), OSPAR Convention.

61 Annex III on offshore sources might at first sight seem relevant, but the Convention limits this Annex to offshore installations and offshore pipelines from which substances and energy reach the maritime area (article 1 (k) OSPAR Convention). While offshore installations and pipelines (article 1 (l) and (m) OSPAR Convention) are linked to offshore activities, article 1(j) of the OSPAR Convention limits its application to liquid and gaseous hydrocarbons, and is as such not relevant for seabed mining of solid minerals.

62 Article 2(a), Annex V, ibid.

63 Article 13(2), OSPAR Convention.

64 Article 13(5), OSPAR Convention.

MPAs are designated by the parties in areas under their jurisdiction, and in case of MS of the EU, these areas are mostly designated under the EU Birds and Habitats Directives.

More importantly, a restriction or prohibition on seabed mining activities does not automatically follow upon an OSPAR MPA designation. Consequently, unless it is explicitly provided otherwise, it is possible for seabed mining to occur in marine areas under national jurisdiction that have been designated as OSPAR MPAs (although this would seemingly be controversial and might be rebuked by other OSPAR parties). This is because for OSPAR MPAs under national jurisdiction, the coastal states concerned bear the responsibility to establish and implement management actions (programmes, measures, restrictions, EIA processes, among others), including with regard to seabed activities having an effect on the protection of the MPA.[65] Indeed, OSPAR provides a platform to coordinate the implementation of the MSF Directive.[66] As a result, the indicators of biological diversity and sea floor integrity[67] are applicable for the continental shelves of MS of the EU located in an MPA of OSPAR.[68]

OSPAR MPAs located in the High Seas and in the Area, collectively designated by the OSPAR parties, require cooperation with a competent international organization to take further management actions that have universal effects.[69] Cooperation with the ISA will in that case be obviously required to manage potential seabed mining activities. Although this cooperation is not explicitly mentioned in Annex V,[70] it follows from the legal status of the Area.[71] Indeed, the OSPAR Commission explicitly acknowledges the need to cooperate with the ISA in MPAs where seabed mining might have an effect on the protective measures to be taken.[72] A Memorandum of under-

65 OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas adopted by OSPAR 2003 OSPAR 03/17/1, Annex 9, amended by OSPAR Recommendation 2010/2, OSPAR 10/23/1, Annex 7.

66 4.2. Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2030 (NEAC 2030): Agreement 2021-01, OSPAR 21/13/1, Annex 22.

67 A qualitative descriptor for GES for sea-floor integrity means that 'sea-floor integrity is at a level that ensures that the structure and functioning of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected', Appendix 2 of Annex I of the MSF Directive.

68 See OSPAR, *Existing OSPAR measures in support of MSFD programmes of measures – 'OSPAR acquis'*, 2015.

69 OSPAR measures apply to OSPAR contracting parties only: 4.3 OSPAR's Regulatory Regime for establishing Marine Protected Areas (MPAs) in Areas Beyond National Jurisdiction (ABNJ) of the OSPAR Maritime Area, Summary Record-OSPAR 2009, OSPAR 09/22/1-E, Annex 6.

70 In contrast to fisheries, for which no programme or measure concerning the management of fisheries can be adopted under Annex V (Article 4(1), Annex V, ibid.), so cooperation with the EU (if under national jurisdiction of EU member states) and with relevant regional fisheries management organizations in ABNJ is necessary to take management actions. See e.g. Memorandum of understanding between the North East Atlantic Fisheries Commission (NEAFC) and the OSPAR Commission: Agreement 2008-4 and the NEAFC-OSPAR Collective arrangement between competent international organizations on cooperation and coordination regarding selected areas in areas beyond national jurisdiction in the North-East Atlantic: Agreement 2014-09.

71 Article 137 UNCLOS; see also article 145 UNCLOS on the protection of the marine environment in the Area.

72 See the OSPAR website <https://www.ospar.org/work-areas/bdc/species-habitats/implementation-of-species-and-habitat-recommendations> (accessed 21 April 2021); see also 3.2. b. (ii), OSPAR Recommendation 2003/3 on a Network of Marine Protected Areas; OSPAR Decision 2010/1 on the Establishment of the Milne Seamount Complex Marine Protected Area and OSPAR Recommendation 2010/12 on the Management of the Milne Seamount Complex Marine Protected Area, recognize in the preamble that 'a range of human activities occurring, or potentially occurring in the Milne Seamount Complex area are regulated in the frameworks of other competent authorities. These include, in particular […] extraction of mineral resources (International Seabed Authority (ISA)'. The same reference to ISA can be found in OSPAR Decision 2021/01 on the Establishment of the North Atlantic Current and Evlanov Sea basin Marine Protected Area and OSPAR Recommendation 2021/01 on the Management of the North Atlantic Current and Evlanov Sea basin Marine Protected Area. Other decisions and recommendations focus mainly on the effects of high seas fisheries in OSPAR MPAs: Decisions and Recommendations regarding the Altair

standing was concluded in 2010 between the OSPAR Commission and the ISA[73] to strengthen cooperation and consultation between themselves, and to encourage marine scientific research in the sea areas of the North-East Atlantic beyond national jurisdiction. This Memorandum of understanding also supports the effectiveness of measures aimed at the conservation of biological diversity in those areas and the collection and exchange of environmental data. Notwithstanding the above, it must be stressed that as things currently stand, the ISA is under no strict obligation to respect or give effect to any MPA or other area-based conservation measures adopted in ABNJ by any other organization or treaty body (including OSPAR). As a result, it may consider and decide to approve exploration or future exploitation contracts in the Area that coincide or overlap with such measures.

It should also be noted that OSPAR MPAs located in the High Seas and the Area require OSPAR parties to manage human activities under their control in such a way as to achieve the conservation objectives of these MPAs. Such management measures include programmes and measures, such as awareness raising at national and international level, as well as sharing information about impacts of human activities and knowledge about the ecosystem and the biodiversity of MPAs. The OSPAR Code of conduct for responsible marine research in the deep seas and High Seas,[74] applicable to national research vessels and research institutions, also plays a key role in supporting and guiding the conduct of marine scientific research in MPAs, and helps ensure that plans for human activities, within or outside MPAs, are subjected to an EIA or an SEA if they have a potential conflict with the conservation objectives of the MPA. Last but not least, OSPAR also adopted a Guidance for good practice for communication with stakeholders on the establishment and management of marine protected areas,[75] recommending, in the planning of new activities and assessment of their potential impacts on the MPA, the use of best-available scientific advice and the involvement of relevant stakeholders in the planning process. To this end, OSPAR parties are expected to encourage third parties and international organizations to apply these programmes and measures.

Finally, it is important to highlight a recent development whereby a Task force for deep sea mining has been created under the Environmental Impacts of Human Activities Committee of OSPAR in 2019.[76] This Task force is led by the United Kingdom and supported by Belgium, Germany, Norway, Sweden and France.[77] Some exchanges have so far been made on the general positions of OSPAR parties relating to seabed mining, as well as on how they could meet their obligations under the OSPAR Convention. In 2021, Seas at Risk, an observer participant of the Task force, proposed a moratorium on seabed mining in the OSPAR Convention area. Although

Seamount, the Antialtair Seamount, the Josephine Seamount, Charlie-Gibbs South, Charlie-Gibbs North and the Mid-Atlantic Ridge north of the Azores High Seas.

73 Agreement 2010-9, OSPAR 10/23/0, Annex 12.

74 OSPAR Agreement 2008-1, OSPAR 08/24/1, Annex 6.

75 OSPAR Agreement 2008-2.

76 The term 'deep sea mining' in this context is used by OSPAR, and thus, it is unclear if the Task force will also cover seabed mining in shallow waters. The Task force covers the OSPAR Convention area and reports to EIHA. Unfortunately, the OSPAR website does not contain any direct web link to specifically highlight the work of the Task force. Nevertheless, details on the Task force and its work can be found in the minutes of the recent EIHA meetings. See especially documents relating to the meeting of March 2021 <https://www.ospar.org/meetings/archive/environmental-impact-of-human-activities-2021> and March 2022 <https://www.ospar.org/meetings/archive/environmental-impacts-of-human-activities-committee-1> (both accessed on 21 April 2022).

77 In addition to those OSPAR parties, several observers are also involved in the Task force. See document 'Annex 6 – NEAES Implementation Plan draft EIHA task templates', item 8, of the March 2021 EIHA meeting, op. cit.

this proposal was discussed, it did not receive any support from OSPAR parties.[78] Moving forward, the Task force is expected to continue working in 2022–2023 with the aim to produce a series of discussion papers relating to seabed mining on technical aspects, relevant OSPAR measures, and, if deemed appropriate based on discussions in 2023 on policy recommendations for OSPAR parties, including how OSPAR could further engage with the ISA.[79]

The Barcelona Convention

The Barcelona Convention[80] is an emblematic instrument which influenced the making of many other regional conventions due to the mechanism set up between the convention and its seven protocols.[81] It comprises 22 contracting parties[82] bordering the Mediterranean Sea, including the EU. Of direct interest to this section is the Offshore Protocol,[83] which aims to reduce and respond to the pollution resulting from the exploration and exploitation of the continental shelf, the seabed and its subsoil in the whole Mediterranean Sea.[84] Signed in 1994, it however only entered into force on 24 March 2011 and is today the second least ratified protocol of the Barcelona Convention with only eight ratifications.[85] Mainly focused on oil and gas activities to date,[86] the Offshore Protocol nevertheless embraces a broader scope as it covers all mineral resources whether solid, liquid or gaseous[87] and includes an exhaustive list of exploration and exploitation activities, relevant for seabed mining.

Its main feature is to establish a mechanism of prior authorization, subject to specific requirements,[88] assessing whether activities and related installations are following international

78 See document 'EIHA 2021 Summary Record', paragraphs 7.30–7.38, of the March 2021 EIHA meeting, op. cit.

79 See documents 'EIHA 2022 Summary Record', paragraphs 7.17–7.19, and 'Annex 5 – S7.05.03 revised task template', of the March 2022 EIHA meeting, op. cit.

80 The *1995 Convention for the Protection of the Mediterranean Sea Against Pollution* (Barcelona Convention), 1102 U.N.T.S. 27 (previously known as the 1976 Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean).

81 The protocols are individually subject to a ratification mechanism.

82 Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syrian Arab Republic, Tunisia, Turkey and the European Union.

83 *Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from the Exploration and Exploitation of the Continental Shelf and the Seabed and Its Subsoil* (Madrid Offshore Protocol), 2010 U.N.T.S. 2742. This Protocol was complemented by a 2016 Action Plan aiming to integrate, among others, the Mediterranean strategy for sustainable management, as well as ten objectives and seven guiding principles. Of direct relevance for the relationship with EU Law, see article I.3 mentioning that the provisions of the Protocol 'shall be without prejudice to stricter provisions regulating the management of offshore activities contained in other existing or future national, regional or international instruments or programmes, when considering existing best practices for the development of standards for the Mediterranean region'.

84 This Protocol implements article 208 of UNCLOS and adopts a vertical and horizontal approach by covering the seabed, but also the waters. See article 2, para 1, Offshore Protocol, ibid.

85 Greece, France, Italy, Malta, Slovenia and Spain ratified the Convention but not the Offshore Protocol. Only Cyprus, Croatia and the European Union have ratified both.

86 Exploration activities cover scientific research, exploration, seismological activities, surveys of seabed and subsoil, sample taking and exploration drilling. Exploitation activities cover the establishment of an installation for the purpose of recovering resources and activities connected, development drilling, recovery, treatment and storage, transportation to shore by pipeline or body of ships, maintenance, repair and other ancillary operations. See Art. 1 d), Offshore Protocol.

87 Article 1 c), ibid.

88 Article 5, ibid.

standards and practice, and whether the operator has technical competence as well as financial capacity to carry out activities. The Offshore Protocol also strengthens the protection of Mediterranean specially protected areas[89] already given under the *1995 Specially Protected Area and Biological Diversity Protocol of the Barcelona Convention*.[90] These additional measures concern the granting of authorization and require (1) special restrictions or conditions such as the preparation or evaluation of environmental impact assessment, or the elaboration of special provisions for monitoring, removal of installations or prohibition of any discharge; and (2) intensifying exchange of information among stakeholders on matters affecting these Mediterranean specially protected areas.[91]

The transposition of the Offshore Protocol into EU law was done through the 2013 Directive on Safety of Offshore Oil and Gas Activities, although this remains incomplete. Indeed, this Directive only concerns oil and gas activities, while the scope of the Offshore Protocol covers exploration and exploitation activities of all mineral resources. Substantial amendments[92] to the Annexes of the Offshore Protocol were adopted in December 2021.[93] They mainly amend the list of prohibited disposal of harmful, noxious substances and materials,[94] the factors to be considered for the issue of permits[95] and environmental impact assessment.[96] The related guidelines for the conduct of environmental impact assessment have been also revised,[97] together with a broadening of the screening process to determine the obligation of an environmental impact assessment, and the deletion of the minimum thresholds in favour of a non-exhaustive list of activities. These amendments are supported by the EU,[98] which sees it as an opportunity to further affirm its ambition with regards to the protection of the marine environment. However, it remains to be seen if the EU will seize the opportunity of these amendments to fully implement the Offshore Protocol into EU law. Full implementation is indeed critical since Italy and Greece, which did not ratify the Offshore Protocol, might someday consider exploring and exploiting the polymetallic sulphides located on their continental shelves.[99] If this happens, the EU might find itself in an awkward situation where its legal responsibility (for failure to fully implement the Offshore Protocol and potential related damages) could be engaged under the Barcelona Convention.[100]

89 And any other areas established by a party. Article 21, ibid.

90 The MSPA Protocol was adopted in 1995 and entered in force in 1999. The European Union ratified it in 1995. This 1995 MSPA Protocol geographic scope covers the seabed and subsoil of the Mediterranean Sea. It comprises an obligation to take protection measures for the protection of MSPA including the regulation or prohibition of any activity involving the exploration or modification of the soil or the exploitation of the subsoil of the land part, the seabed and its subsoil. Article 6, e), 1995 Specially Protected Area and Biological Diversity Protocol.

91 Non-exhaustive list. See Article 21, Offshore Protocol.

92 Non-exhaustive list. For the full list, see UNEP-MAP, *Amendments of the Annexes to the Mediterranean Offshore Protocol*, EP/MED WG.498/4, 12 May 2021.

93 Amendments to the Annexes to the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, *Decision IG.25/7*, UNEP/MED IG. 25/27, December 2021.

94 Non-exhaustive list.

95 Annex III, C, 5), EP/MED WG.498/4, op. cit.

96 Annex IV, Article 1, ibid.

97 New definitions or modifications of 'baseline scenario', 'environmental assessment', 'offset', 'source', 'study area' are proposed, together with a deletion of the concept of 'restoration'.

98 European Commission, *Council Decision Proposal*, COM(2021) 668 Final, 26 October 2021.

99 For a map indicating the location of these resources, see the website of EMODnet of the European Union. Available online <https://webgate.ec.europa.eu/maritimeforum/en/node/4447> (accessed 24 April 2022).

100 Article 22 and Annex A, Barcelona Convention. See also article 8 of Annex A, clarifying the fact that the EU could appear as respondent in an arbitration case. Such scenario is, however, unlikely considering the political dimension that such proceeding entails.

The Helsinki Convention

The third and final regional agreement that applies to EU marine space is the *1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area* (Helsinki Convention),[101] although some parts of the Baltic Sea area fall outside the jurisdiction of MS. The Helsinki Convention has ten contracting parties, including the EU and eight MS (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden) as well as Russia, covering all coastal States of the Baltic Sea. Originally adopted in 1974, the Helsinki Convention was revised in 1992 to take into account geopolitical changes in the region (namely, the reunification of Germany and the fall of the USSR) as well as to address the pressing environmental challenges to the marine area that had emerged.[102] The Helsinki Convention entered into force on 17 January 2000, and currently comprises seven annexes. The governing body of the Helsinki Convention, the Baltic Marine Environment Commission (HELCOM), adopted the Baltic Sea Action Plan in 2007, which was recently revised in October 2021.[103] With respect to the EU specifically, the EU Strategy for the Baltic Sea Region was adopted in 2009,[104] alongside an Action Plan that was most recently revised in February 2021.[105] Moreover, following a HELCOM Ministerial Declaration in 2010, HELCOM also performs the role of coordinating the EU's MSF Directive to strive to harmonize national marine strategies of MS to achieve good environmental status in the Baltic Sea area.[106] In this respect, it has been observed that the Baltic Sea Action Plan and the MSF Directive have strong links to each other and are closely aligned.[107]

Compared to the other two regional agreements discussed earlier, HELCOM appears to be slightly lagging behind with respect to seabed mining coverage. While article 4, paragraph 1, stipulates that the Convention 'shall apply to the protection of the marine environment of the Baltic Sea Area which comprises the water-body and the seabed' and article 12 (on exploration and exploitation of the seabed and its subsoil) is broadly drafted with a focus on the protection of the marine environment,[108] the Convention's specific annex on offshore activities (Annex VI: prevention of pollution from offshore activities) explicitly specifies that it only targets the exploration and exploitation of offshore oil and gas.[109] Thus, in adopting such a specific definition for 'offshore activities', there is a clear gap in terms of regional regulation of seabed mining with respect to the

101 The *1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area* (Helsinki Convention), 2009 U.N.T.S. 197, 13 ILM 546 (1974).

102 For a historical account of the Helsinki convention, see <https://helcom.fi/about-us/convention/> (accessed 20 February 2022).

103 Baltic Sea Action Plan, adopted 15 November 2007 and updated 20 October 2021. Available online <https://www.helcom.fi/wp-content/uploads/2019/08/BSAP_Final.pdf> and <https://helcom.fi/media/publications/Baltic-Sea-Action-Plan-2021-update.pdf> (accessed 20 February 2022).

104 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the European Union Strategy for the Baltic Sea Region and Action Plan, COM(2009) 248 final, 10 June 2009.

105 Commission Staff Working Document, EU Strategy for the Baltic Sea Region Action Plan (COM(2009) 248 final), Revised Action Plan replacing the Action Plan of 17 March 2017, 15 February 2021.

106 HELCOM Ministerial Declaration on the implementation of the HELCOM Baltic Sea Action Plan, 20 May 2010, Moscow. Available online <https://helcom.fi/wp-content/uploads/2019/08/HELCOM-Moscow-Ministerial-Declaration-FINAL.pdf> (accessed 20 February 2022).

107 J. van Leeuwen, L. van Hoof and J. van Tatenhove, 'Institutional ambiguity in implementing the European Union Marine Strategy Framework Directive', *Marine Policy* 36(3), 2012, 636–643.

108 Helsinki Convention.

109 Annex VI, ibid.

Baltic Sea area (which the Helsinki Convention or its annexes have not covered to date). This gap is problematic, especially since it is known that there are significant numbers of mineral concretions on the continental shelf of Finland, for example, including ferromanganese deposits that have attracted mining interests.[110] In this respect, there has been a recent proposal to the Helsinki Commission to adopt a moratorium on seabed mining in the Baltic Sea area.[111]

Given the broad scope of the Convention text, as seen in article 4, paragraph 1 and article 12 (which do not limit its application to offshore oil and gas activities), it is entirely possible for Annex VI to be expanded to include seabed mining or for a new and dedicated annex on seabed mining to be developed in the future. Crucially, HELCOM parties have started to pay more attention to the topic of seabed mining in recent times. In the updated Baltic Sea Action Plan adopted by HELCOM in October 2021, the following is mentioned: 'in order to minimize the short and long-term impacts of seabed mining (excluding sand and gravel extraction), minerals should not be exploited before the effects of seabed mining on the marine environment, biodiversity and human activities have been sufficiently researched. The risks need to be understood and technologies and operational practices should be able to demonstrate that the environment is not seriously harmed by seabed mining activities, in line with the precautionary principle'.[112] As a consequence, it is entirely possible that HELCOM parties will build upon this political determination and continue to pay closer attention to future seabed mining activities in the Baltic Sea area and adopt appropriate binding measures and regulatory responses as necessary.

Further analysis and observations

Upon reflection on the original framework and subsequent evolution of the three regional seas conventions in response to seabed mining, especially in recent years, it seems clear that the theme is now an important agenda item under all three conventions. However, while some political will to address the topic has started to emerge, including through the adoption of specific measures, the regulatory responses remain largely deficient. For instance, from the perspective of regulatory instruments, while the Offshore Protocol under the Barcelona Convention is the only instrument across all three conventions that explicitly includes seabed mining in binding regulations, the fact remains that barely a third of the parties to the said Convention have ratified the Offshore Protocol. Moreover, the transposition of the Offshore Protocol into EU law remains incomplete as only elements relating to offshore oil and gas have been incorporated and not seabed mining. As a consequence, this may expose the legal responsibility of the EU, as a party to the Offshore Protocol, in case Italy or Greece someday choose to proceed with exploration and exploitation of seabed minerals on their respective continental shelves. In addition, apart from constant external pressure from advisory councils and non-governmental bodies to address seabed mining,[113] there

110 University of Helsinki, Sea floor mineral deposits are common in northern Baltic Sea, online edition, 2019. Available online <https://www.helsinki.fi/en/news/life-sciences/sea-floor-mineral-deposits-are-common-northern-baltic-sea> (accessed 22 December 2021).

111 Coalition Clean Baltic, 'Adoption of a moratorium on seabed mining in the Baltic Sea, including a moratorium on developing additional permissive regulations and exploitation and exploration contracts', Submission to HELCOM, 2019. Available online <https://portal.helcom.fi/workspaces/BSAP%20UP%20NEW%20ACTIONS-183/Shared%20Documents/Synopses%20-%20proposals%20received/Moratorium%20on%20seabed%20mining%20in%20the%20Baltic%20Sea.pdf> (accessed 22 December 2021).

112 HELCOM, Baltic Sea Action Plan as updated in 2021, op. cit., p. 40.

113 See for example, a recent statement from a large network of organizations delivered to the 2021 Conference of the Parties to the Barcelona Convention expressing concern about the environmental implications of deep-sea

seems to be at the moment little political will to actually engage directly with the topic under the Barcelona Convention, although this may change in the future.[114]

In contrast, while currently lagging behind in terms of not having extended its regulatory instruments to explicitly cover seabed mining, the OSPAR Commission and HELCOM seem to have embraced the need to take some concrete measures as well as political steps to address seabed mining. In the case of OSPAR, this can be seen (albeit to a limited extent) through measures that have been taken to designate MPAs, including those in ABNJ, as well as the recent establishment of the Task force on deep seabed mining to facilitate discussions and exchanges among its parties. However, in terms of political steps, HELCOM appears to have taken the lead by far, as reflected in its recently revised Baltic Sea Action Plan that specifically singles out seabed mining.

Moreover, it would seem to be quite apparent that the dynamics and composition of the various regional sea conventions carry an impact on the approach that has been taken to influence their future directions in the context of seabed mining. To this end, OSPAR makes an interesting case study for two reasons: one, the seabed resource potential within the Convention area is quite significant in relative comparison to the other two regimes, and two, the OSPAR Convention area extends, in some parts, into ABNJ. Furthermore, compared to the other two regimes and their respective compositions, some OSPAR parties have much more interest in seabed resources. These include several MS of the EU (Belgium,[115] France[116] and Germany[117]) as well as the UK[118] and Norway, although it must be stressed that with the exception of Norway, whose interests in seabed mining at the moment are primarily within its continental shelf, the interests of the other parties are

mining in the Mediterranean Sea <https://mio-ecsde.org/wp-content/uploads/2021/12/Statement-to-the-Ministers-at-COP22-of-the-Barcelona-Convention_3.pdf> (accessed 21 April 2022).

114 Especially if the EU decides to support the call for a moratorium of seabed mining activities within the Barcelona Convention to promote its 2030 Biodiversity Strategy. The authors however find that the EU position is still currently lacking political solidity to do so, especially with regards to seabed mining on continental shelves.

115 For more information on the position of Belgium towards seabed mining, see K. Willaert and F. Maes, 'Belgium and seabed mining', in V. Tassin Campanella (ed.), *Routledge handbook of seabed mining and the law of the sea*, London: Routledge, chapter VI.2.1.

116 Following a 2021 Revised Strategy for Deep Seabed applicable both *within* and *beyond* national jurisdiction, as well as a 2022 Military Deep Seabed Management Strategy, both with the intention to strengthen the State capacity of exploration while protecting industrial and military interests (Comité interministériel de la mer, *Dossier de presse*, March 2022 and Ministère des Armées, *Stratégie ministérielle de maîtrise des fonds marins*, February 2022), France is contemplating the suppression of the only moratorium of exploitation of mineral resources on the French continental shelf to access to sand resources (Outre Mer, Livre IV, Articles L. 611-1 and 2). In view of these developments, the French Senate conducted an information mission dedicated to the exploration, protection and exploitation of deep seabed areas, with a report recommending caution in moving forward with exploitation activities due to the lack of sufficient scientific information (French Senate, 'Abysses: la dernière frontière?', June 2022, available online <http://www.senat.fr/commission/missions/2021_fonds_marins.html> (accessed 19 August 2022)). Shortly after, at the 2022 UN Ocean Conference, the French President declared its ambition to stop 'high seas mining' and not allow ocean extractive activities to endanger key marine ecosystems. As a result, the French Parliament adopted in January 2023 an exploitation moratorium in the Area. The impact of this resolution on similar activities on the French continental shelf remains uncertain.

117 In November 2022, Germany called for a precautionary pause on seabed mining in the Area. For more information on the position of Germany towards seabed mining, see N. Matz-Lück, 'Germany and seabed mining', in V. Tassin Campanella (ed.), *Routledge handbook of seabed mining and the law of the sea*, op. cit., chapter VI.2.5.

118 For more information on the position of the United Kingdom towards seabed mining, see J. Harrison, 'The United Kingdom and seabed mining', in V. Tassin Campanella (ed.), *Routledge handbook of seabed mining and the law of the sea*, op. cit., chapter VI.2.14.

in seabed minerals located in areas outside OSPAR jurisdiction.[119] However, other OSPAR parties and MS of the EU seem more cautious about seabed mining within national jurisdiction despite having significant potential resources within their respective continental shelves. This is the case for Portugal,[120] but also for Spain, which recently in March 2022 issued a decree that effectively bans seabed mining on its continental shelf for the time being.[121]

In addition to the above, the BBNJ Agreement should also have a discernible impact on the cooperation and coherence between these various bodies and their respective arrangements (although such extent will vary, with OSPAR standing to be most affected), especially on the issues of standards, EIAs and area-based management tools (ABMTs).[122] These varying dynamics would likely complicate the decision-making processes at OSPAR and provide an indication that it may require more effort to take bold and ambitious steps to address seabed mining at OSPAR (in comparison to HELCOM, for example). It would therefore be very interesting to see how these regimes would evolve and respond to the theme of seabed mining, especially in the case of OSPAR. Finally, even though the positions on seabed mining that parties take in regional seas conventions are not necessarily the same as their respective positions at the ISA, the evolution of and developments that occur within the regional seas conventions could send impulses to and have implications on seabed mining in the Area, which will be discussed next.

The position of the European Union on seabed mining and recent developments in areas beyond national jurisdiction

Position of the European Union on seabed mining

Although the EU has not been very explicit on this matter, there appears to have been a discernible shift in terms of the position of the EU with respect to seabed mining in recent years. Between the early 2000s and early 2010s, the EU seemed to be supportive of these activities. This seemingly pro-mining inclination can be gleaned from, among others, the EU's interests in 'access to and affordability of mineral raw materials (that) are crucial for the sound functioning of the EU's economy' as expressed in 2008,[123] and promoting blue growth in the EU by 'assessing how European industry can become competitive in extracting minerals from the seafloor' as expressed in 2012,[124] as well as through the funding regulatory capacity-building projects such as the SPC-EU Deep

119 The situation of France in this respect is a unique one compared to the others (as Belgium, Germany and the UK's current seabed mineral interests are all located in the Area). French interests are primarily in seabed minerals outside of OSPAR jurisdiction, namely, minerals located on the continental shelves of French overseas territories, as well as in the Area.

120 See the national section of Portugal in this book. M. Neves and P. Madureira, 'Portugal and seabed mining', in V. Tassin Campanella (ed.), *Routledge handbook of seabed mining and the law of the sea*, op. cit., chapter VI.2.13.

121 Royal Decree 218/2022 on 29 March 2022 (modifying Royal Decree 79/2019 of 22 February 2019), entered into force on 13 April 2022, Preamble, h) endorsing the call of the EU parliament under the 2030 Biodiversity Strategy. The scope of this so-called prohibition is limited to the continental shelf of Spain according to article 6, paragraph 2, on the Law of the Protection of the Marine Environment, 41/2010 of 29 December 2010, as referred to in Royal Decree article 3, paragraph 3.

122 Indeed, there is a provision in the BBNJ Agreement related to high seas pockets; see article 21, para 4.

123 Communication from the Commission to the European Parliament and the Council, 'The raw materials initiative – meeting our critical needs for growth and jobs in Europe' (COM(2008) 699 final), 4 November 2008.

124 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Blue Growth opportunities for marine and maritime sustainable growth' (COM(2012) 494 final), 13 September 2012.

Sea Minerals Project (initiated in 2011).[125] However, the mid-2010s exhibited a marked shift in the EU's positioning, whereby there has evidently been more circumspection and hesitance in subsequent outputs. This cautious attitude and support for the application of the precautionary principle can be observed via, among others, the 2014 ACP-EU Joint Parliamentary Resolution on Mining for Seabed Minerals,[126] the 2018 EU Parliament Resolution on international ocean governance calling for an international moratorium on commercial-scale seabed mining for the first time within the EU institutions,[127] the Commission's 2020 EU Biodiversity Strategy for 2030[128] and the related EU Biodiversity Strategy Parliament Resolution in June 2021,[129] as well as the recently revised EU International Ocean Governance Agenda in June 2022.[130]

The 2018 EU Parliament Resolution called on MS to stop sponsoring deep-sea mining exploration and exploitation licenses in the Area and not to issue permits for seabed mining on the continental shelf.[131] It also called on MS to support an international moratorium on commercial seabed mining exploitation licences until 'such time as the effects of (seabed mining) on the marine environment, biodiversity and human activities at sea have been studied and researched sufficiently and all possible risks are understood'.[132] Following this call, the scope of this moratorium has fluctuated at the EU between the one proposed by the Commission under the EU Biodiversity Strategy,[133] which is limited to the Area, and the one recently adopted by the Parliament, again covering both the continental shelf and the Area.[134] The recently revised EU International Ocean Governance agenda seems to also target both the continental shelf and the Area, although this is not explicitly specified.[135] While it does not mention the word 'moratorium', reference is made to the recent IUCN resolution adopted in September 2021 calling for one.[136] Moreover, the instrument

125 SPC-EU Deep Sea Minerals Project. More information available online <https://dsm.gsd.spc.int/> (accessed 24 December 2021). For more information on the position of the Pacific region towards seabed mining, see C. Diver€he Pacific Islands region and seabed mining', in V. Tassin Campanella (ed.), *Routledge handbook of seabed mining and the law of the sea*, op. cit., chapter VI.1.5.

126 ACP-EU Joint Parliamentary Assembly Resolution on mining for oil and minerals on the seabed in the context of sustainable development (ACP-EU/101.546/14/fin), 2 October 2014.

127 European Parliament Resolution on international ocean governance: an agenda for the future of our oceans in the context of the 2030 SDGs (2017/2055(INI)) (P8_TA(2018)0004), 16 January 2018.

128 European Commission, EU Biodiversity Strategy for 2030: Bringing nature back into our lives, COM(2020) 380 final, 20 May 2020.

129 European Parliament Resolution on the EU Biodiversity Strategy for 2030: Bringing nature back into our lives (2020/2273(INI)) (P9_TA(2021)0277), 9 June 2021.

130 Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee Of The Regions, Setting the course for a sustainable blue planet – Joint Communication on the EU's International Ocean Governance agenda, JOIN(2022) 28 final, 24 June 2022.

131 Paragraph 40, (2017/2055(INI)) (P8_TA(2018)0004), op. cit.

132 Paragraph 42, ibid.

133 Section 4.2.1 at pp. 20–21, COM(2020) 380 final, op. cit.

134 As follows: 'calls on the Commission and the Member States to promote a moratorium, including at the International Seabed Authority, on deep-sea mining until such time as the effects of deep-sea mining on the marine environment, biodiversity and human activities at sea have been studied and researched sufficiently and deep sea mining can be managed to ensure no marine biodiversity loss nor degradation of marine ecosystems; emphasises the need for the Commission to cease funding for the development of deep-sea mining technology in line with a circular economy based on minimising, reusing and recycling minerals and metals'. Paragraph 184, (2020/2273(INI)) (P9_TA(2021)0277), op. cit.

135 See in the same way the EU Parliament Resolution, *Momentum for the ocean: strengthening ocean governance and biodiversity*, 2022/2836(RSP), 6 October 2022, paragraph 6.

136 JOIN(2022) 28 final, op. cit., at footnote 15 on p. 4. The said Motion 069 (protection of deep-ocean ecosystems and biodiversity through a moratorium on seabed mining) was passed at the IUCN World Conservation

does appear to adopt similar, if not stronger, terminology, including that the EU will 'continue to advocate for prohibiting deep-sea mining' until such time where existing scientific gaps are closed and it is possible to demonstrate that no harmful effects arise from mining.[137] This is a sharp contrast to the previous version of the International Ocean Governance agenda that was released in 2016,[138] which barely made any reference to seabed mining.[139] Consequently, there seems to be inconsistencies within EU institutions on the position that it should advocate on seabed mining on the continental shelf, although the position on the need for a moratorium on commercial-scale exploitation in the Area has always been clear. In this respect, however, it would seem that recent efforts are slowly and subtly seeking to streamline the EU's position pertaining to seabed mining on both the continental shelf and the Area.

Such shifting positions or changes in scope of coverage could probably be explained by tensions between the EU institutions with, on the one hand, (1) MS that are keen on exploring and possibly eventually exploiting the mineral resources of their own continental shelves and may also wish to take a similarly consistent position in the Area, as well as (2) those MS whose seabed mining interests lie exclusively in the Area, and (3) MS that do not currently possess any serious interests in seabed mining but would like to keep their options open for the future, or (4) those that may instead wish to limit their present involvement through the development and sale of mining equipment, technologies or vessels and other services to industry. On the other hand, potential friction and environmental concerns could also arise with (1) some MS with known abundant seabed mineral resources on their continental shelves, which have or are in the process of taking a more cautious approach to seabed mining within national jurisdiction, as well as (2) MS that do not have significant seabed mineral resource prospects on their continental shelves or current stakes in the Area, or (3) those MS that are landlocked or geographically disadvantaged and are concerned about the implications of seabed mining, that could actually harbor the desire to see a similarly cautious approach to seabed mining be replicated in the Area.

In any event, it can be surmised that while the need to ensure secure supply chains for critical metals still appears to be on the agenda of the EU,[140] especially in the light of ongoing geopolitical

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Congress with overwhelming support and adopted as Resolution 122, which can be found on the IUCN website <https://portals.iucn.org/library/sites/library/files/resrecfiles/WCC_2020_RES_122_EN.pdf> (accessed 18 August 2022).

137 Ibid., pp. 4–5: 'On deep seabed mining, there is a broad consensus in the scientific community and among States that knowledge related to deep-sea environment and the impacts of mining are not comprehensive enough to enable evidence-based decision-making to allow for proceeding safely with exploitation. The EU will continue to advocate for prohibiting deep-sea mining until these scientific gaps are properly filled, that it can be demonstrated that no harmful effects arise from mining and, as required under the UNCLOS, the necessary provisions in the exploitation regulations for the effective protection of the marine environment are in place. The EU will continue to contribute to the negotiations of the exploitation regulations at the International Seabed Authority (ISA) to achieve a robust framework for marine environment protection, including standards and guidelines for threshold values and normative standards. In parallel, the EU is supporting research to improve knowledge on deep sea ecosystems and on monitoring and supervising technologies'.

138 Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, International ocean governance: an agenda for the future of our oceans, JOIN(2016) 49 final, 10 November 2016.

139 That said, it is interesting to note that the instrument mentions on page 2 that: 'By 2018, the Commission will produce guidance on the exploration and exploitation of natural resources on the seabed in areas under national jurisdiction, to assist coastal Member States respect their duty under UNCLOS to protect and preserve the marine environment'.

140 COM(2008) 699 and COM(2012) 494 respectively, op. cit.

tensions, internal conflicts and war (and how these events could significantly affect the security of supply of critical metals to the EU),[141] the EU's current attitude towards seabed mining in the Area appears to be more cautious, supportive of a strong interpretation of the precautionary principle, and favouring the need to be satisfied that the effective protection of the marine environment can be assured before allowing commercial-scale mining to commence.

The role of the European Union at the International Seabed Authority

A 2021 proposal for an EU Council Decision[142] demonstrates that the EU is willing to develop a new and more effective way of contributing and exercising its internal and external[143] competences within the ISA. To do so, this proposal suggests adopting a common EU position for meetings of the ISA Council and Assembly. This position should be based on a two-tier approach and follow guiding principles and orientations, elaborated ahead by the European Council, which will then be implemented and adjusted for each meeting via non-papers prepared by the Commission and discussed by a 'Council Working Party'. The proposal comprises a strong focus on the protection of the marine environment, adherence to the precautionary principle and the ecosystem-based approach, and reliance on best available science. It also states that the EU 'should advocate that marine minerals in the international seabed area cannot be exploited before the effects of deep-sea mining on the marine environment, biodiversity and human activities have been sufficiently researched, the risks are understood and the technologies and operational practices are able to demonstrate no serious harm to the environment, in line with the precautionary approach'.[144] In reality, this could carry significant consequences, especially since a number of MS are on the ISA Council and could directly influence ISA rule-making and decision-making.[145] Preliminary exchanges seem to indicate that the proposal as it stands is not acceptable to some MS. Owing to the differing interests and positions of its MS with respect to seabed mining in the Area, it does not appear, at least in the near future, that the EU will be able to form and sustain a strong, united voice at the ISA.

Meanwhile, the EU is actively involved in the current work of the ISA. For instance, between 2020 and 2021, the EU submitted written comments in response to the calls for stakeholder input to ten sets of draft standards and guidelines for exploitation issued by the Legal and Technical Commission of the ISA.[146] The EU has also partnered with the ISA on the organization of environmental-related workshops in the past, for example, the Workshop on the Regional Environmental Management Plan (REMP) for the Area of the Northern Mid-Atlantic Ridge through the EU-funded Atlantic REMP Project. The EU has furthermore funded numerous multi-million research projects related to seabed mining, including co-funding the ISA's recently

141 See for example, K. Taylor, 'No green and digital transition without raw materials, EU warns', EURACTIV, 26 April 2022 <https://www.euractiv.com/section/circular-economy/news/no-green-and-digital-transition-without-raw-materials-eu-warns/> (accessed 1 June 2022).

142 Based on article 191 and article 218 (2), TFEU.

143 Article 3 (2), ibid.

144 Annex I to the Proposal for a Council decision on the position to be taken on behalf of the European Union at the meetings of the ISA Council and Assembly (COM(2021) 1), 5 January 2021.

145 The six MS in the 2022 composition of the Council are Czech Republic, France, Germany, Italy, the Netherlands and Poland.

146 See more information on the website of the ISA <https://www.isa.org.jm/submissions-received-respect-stakeholder-consultations-standards-and-guidelines> (accessed 22 December 2021).

launched Sustainable Seabed Knowledge Initiative (SSKI),[147] while some future projects have also been announced.[148]

Contribution of the European Union to the negotiations on biodiversity beyond national jurisdiction

The recently concluded negotiations on the BBNJ Agreement[149] allowed the EU an opportunity to voice its position for the standards of biological conservation and sustainable use to be applied to the Area. Considering the limitations faced by the EU within the ISA and the lack of clear EU regulations applicable for seabed mining in the Area, this opportunity was very much welcomed.

The EU took an active interest in this topic and was strongly engaged in the negotiations.[150] Since 2006, it made extensive contributions on ABMTs and EIA, particularly cumulative and transboundary ones.[151] Consistent with its internal regulations, the EU supported the strengthening of the ecosystem approach within the BBNJ Agreement. During the course of the negotiations, the EU made two significant proposals: (1) include, into the consultation mechanism of the BBNJ Agreement, the case of States with a continental shelf subjacent to a marine protected area placed in areas beyond national jurisdiction (promoting in this way the coherent management of deep seabed between areas *within* and *beyond* national jurisdiction);[152] and (2) under the topic of transboundary EIA, include the obligation according to which UNCLOS State Parties shall ensure that impacts in areas *within* national jurisdiction (so outside of the scope of the BBNJ Agreement, but under the scope of EU law for MS of the EU) will be taken into account when conducting EIA within the scope of the BBNJ Agreement.[153]

The BBNJ Agreement[154] includes both proposals with a stronger recognition of the ecosystem approach distilled throughout the EIA legal regime. The objectives of this regime expressly support the consideration of cumulative impacts and impacts in areas *within* national jurisdiction. While the term 'transboundary impact assessment' has been removed from the EIA legal regime,[155] the concept remains applicable. As a result, a State Party wishing to conduct a planned activity, under its jurisdiction or control *within* national jurisdiction, which may cause substantial pollution or significant and harmful changes to the marine environment in areas *beyond* national jurisdiction, is now under the obligation to ensure the conduct of an EIA in accordance with

147 See ISA website <https://www.isa.org.jm/sski> (accessed 18 August 2022): 'Launched at the 2022 UN Ocean Conference, SSKI will describe over one thousand new species from the regions of the Area that are currently being explored for mineral resources and may be targeted for future exploitation'.

148 For an overview, see Annex II of Seas at Risk, *At a crossroads: Europe's role in deep-sea mining*, 2021, pp. 25–26.

149 Intergovernmental conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. References made to this implementing agreement of UNCLOS are as 'BBNJ Agreement'.

150 See T. Heidar, 'Introduction', in A. de Paiva Toledo and V.J.M. Tassin (eds) *Guide to the navigation of marine biodiversity beyond national jurisdiction*, Belo Horizonte: Editora D'Placido, 2018, pp. 39–55.

151 Based on its own experience of cumulative and transboundary EIA within the EU marine space.

152 *Proposal submitted by delegations by 20 February 2020 for consideration at the fourth session*, A/CONF.232/2020/3, article 18 (European Union and its members), p. 168.

153 Ibid., article 26 (European Union and its members), p. 245.

154 General Assembly of the United Nations, *Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction*, June 2023. Hereinafter 'BBNJ Agreement'.

155 It only remains in Annex I together with cumulative impacts. Annex I is however only applicable to the identification of areas according to Part III.

the BBNJ Agreement or its national process.[156] Other references to this *de facto* transboundary impact assessment are also included into the BBNJ Agreement's thresholds and factors to consider for EIA screening[157] and the process of the EIA (scoping, assessment and evaluation).[158] Finally, the consultation process applicable to EIAs in the BBNJ Agreement includes an obligation for States to 'give particular regard to comments concerning potential impacts in areas within national jurisdiction and provide written responses, as appropriate, specifically addressing such comments, including regarding any additional measures meant to address those potential impacts'.[159]

With regard to ABMTs, the ecosystem approach has been translated into a consultation mechanism with the coastal State in the case of establishment of any of these tools in the waters above the continental shelf.[160] This consultation will however only be triggered in cases where the ABMT 'would affect or could reasonably be expected to affect the superjacent waters above the seabed and subsoil' under which the coastal State exercises its sovereign rights. Considering the sensitivities regarding sovereign rights, it is very likely that this consultation process will be regularly triggered.

The ambition of the EU in the promotion of the ecosystem approach could, however, appear inconsistent at first sight. During the course of the negotiations, the EU indeed supported the view that the BBNJ Agreement should exclude instances where planned activities in areas beyond national jurisdiction are conducted where 'relevant legal instruments and frameworks, and relevant global, regional, sub-regional or sectoral bodies' have mandates for EIA.[161] This scenario, embodied in a more sophisticated way into the BBNJ Agreement,[162] can be seen to promote a multi-gear system and therefore create potential weaknesses in the implementation and cracks into its ambition. As concerns the EU, this can be reconciled by the fact that the EU is intending to develop its own standards and thresholds for projects, plans and programmes of seabed mining in the Area (through for example the EIA/SEA Directives), which will thus be applicable to its own MS, on the top of BBNJ and ISA obligations.

Conclusion

The genesis of the EU as it features today can be traced back to early efforts to foster peace among European countries that were once fierce rivals through economic cooperation, namely, through the creation of a common market for two commodities, coal and steel. While the original ambition to create a single market and customs union has significantly evolved over the years into an elaborate and expansive regime, it is interesting to observe that seabed mining returns the EU to the theme of commodities again, this time with respect to the potential of extracting marine minerals in the quest to retrieve valuable metals. Simultaneously, while the initial impetus was premised on economic interests, the EU has now grown and developed a strong focus on environmental and biodiversity protection and conservation, including over the ocean space. This is particularly visible with respect to implementation of numerous legislations covering marine areas under national

156 Obligation to conduct environmental impact assessment, article 28, paragraph 2, BBNJ Agreement.
157 Article 30, para 2, (e). Ibid.
158 Article 31, (b) and (c). Ibid.
159 Article 32, para 5. Ibid.
160 Article 19, para 6. Ibid.
161 Regardless of whether or not an EIA is required for the planned activity under the jurisdiction or control of a State Party. See comments of the EU on article 23, ibid., p. 224.
162 Article 29, para 4, BBNJ Agreement, op. cit.

jurisdiction of MS, including the continental shelf and extended continental shelf, which are subject to mining interests. However, the regulatory frameworks covering offshore activities remain incomplete as things currently stand, as these frameworks largely relate to oil and gas activities and are yet to be specifically extended to seabed mining of minerals for the most part. Beyond the national jurisdiction of MS, greater uncertainties also exist in relation to the application of the main EU directives that are relevant for mineral exploration and exploitation that are conducted or sponsored by MS in the Area. Consequently, it is clear that the theme of seabed mining demonstrates the uniqueness and complexity of governance at the EU level, with the EU possessing competences (whether exclusive or shared) on a wide range of matters over its MS on the one hand, as well as being a contracting party to numerous multilateral agreements in its own right and using this to implement its treaty obligations affecting its MS (and potentially interacting with their sovereignty and national interests) on the other hand.

In any case, the ambition of the EU for a healthy and productive ocean obviously extends well beyond EU marine space. The EU's International Ocean Governance Agenda, first adopted in 2016[163] and recently revised in 2022,[164] seeks to give effect to the UN Sustainable Development Goals (in particular, SDG 14) by supporting global efforts to ensure the effective protection of the environment and the conservation of biodiversity in all marine spaces, including in areas beyond national jurisdiction. This political agenda, alongside other international parallel developments (such as the post-2020 Global Biodiversity Framework under the 1992 Convention of Biological Diversity and the ongoing 2021–2030 UN Decade of Ocean Science for Sustainable Development), continues to guide the EU to protect the marine environment, promote sustainable uses of the seas and conserve marine biodiversity. Moreover, the EU's International Ocean Governance Agenda is not only designed to implement Agenda 2030 and international law as reflected in UNCLOS;[165] it is first and foremost an instrument of the new EU blue diplomacy developed to 'shape international ocean governance on the basis of (EU) experience'.[166] Applied to seabed mining of minerals, while the EU legal framework appears to be the most advanced in terms of regional regulations, the EU still has a long road to make before becoming a role model. That said, the efforts and steps taken by the EU, both internally and externally (including by contributing towards the work of the ISA and at the BBNJ negotiations), carry significant weight and are crucial in determining the fate of seabed mining, at the very least, insofar as they relate to the EU and bind the MS.

163 JOIN(2016) 49 final, op. cit.

164 JOIN(2022) 28 final, op. cit.

165 See sustainable development goal 14 c). General Assembly, *Transforming our world: the 2030 agenda for sustainable development*, A/RES/70/1, 25 September 2015.

166 'The EU is well placed to shape international ocean governance on the basis of its experience in developing sustainable approach to ocean management, notably through its environment policy (in particular its Marine Strategy Framework Directive), integrated maritime policy (in particular its Marine Spatial Planning Directive), reformed common fisheries policy, action against illegal, unregulated and unreported (IUU) fishing and its maritime transport policy': JOIN(216) 49 Final, op. cit., paragraph 1.2, p. 4. See also JOIN(2022) 28 final, op. cit., p. 4: 'The EU believes that leading by example can inspire progress and help create a shared vision for developing a sustainable approach to ocean management worldwide and recognises that true leadership starts at home'.