High Seas Marine Protected Areas – Impact on Shipping and the imo

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1 Introduction

Shipping is the backbone of international trade in goods, carrying over 11 billion tonnes in shipped traded volume, representing over 80 per cent of the volume of world trade in goods and 70 per cent by value.[[1]](#footnote-1) International shipping bridges continents across vast sea areas at a cheaper price and with a smaller carbon footprint relative to other means of transport.[[2]](#footnote-2) Navigational safety is ensured by the broad selection of routing measures provided by the International Maritime Organizations (imo), which effectively represents an infrastructure of the seas. Passage planning in international shipping is determined based on a complex interaction of factors, where expediency appears to be particularly determinant.[[3]](#footnote-3) Consumption and costs of bunker-fuel is also an important consideration, calling for fuel-efficiency.[[4]](#footnote-4) In recent years the interest of decreasing emissions has also become underlined by objectives to reduce the climate impact of marine transport.[[5]](#footnote-5) The Initial imo strategy on the reduction of greenhouse gas emissions from ships calls for a reduction of total greenhouse gas emissions of shipping by at least 50% by 2050.[[6]](#footnote-6)

The interests of expedient transports and minimising emissions both call for taking the shortest route. While reefs, islands, installations and other features may require less direct routes in coastal waters, ships sailing the high seas can regularly navigate straight courses, based on the shortest distance.[[7]](#footnote-7) Since the high seas regularly lie at least 200 nm away from shores, there are few navigational hazards and features to consider.[[8]](#footnote-8)

In the planning and management of shipping, like other maritime activities in the high seas, little regard has generally been taken to differences in ecological and biological sensitivity across different high seas areas.[[9]](#footnote-9) This is not surprising since these vast sea areas, which represent 2/3 of the surface of the world’s oceans, were long thought to be biological deserts.[[10]](#footnote-10) As a consequence, these sea areas have hitherto been subject to only limited area-based protection measures. In lack of such regulation, it has been self-evident to strive for the shortest and most direct shipping routes, irrespective of ecological variations across sea areas.

2 Increasing Support for Protecting Sensitive High Seas Areas

In recent decades it has however become recognized that the high seas conceal some of the planet’s most unique ecosystems.[[11]](#footnote-11) Marine biodiversity in the high seas is richly patterned, with a high variety of species richness across different areas. Whereas biodiversity is abundant in some parts of the oceans, other areas do not conceal the same richness.[[12]](#footnote-12) Moreover, it has been shown that these ecosystems are sensitive to the detrimental impacts of different human activities, including shipping.[[13]](#footnote-13) The impacts of human activities have also increased significantly in recent years.[[14]](#footnote-14) Among high seas maritime activities shipping has in several studies been considered to have the second-highest environmental impact after fisheries.[[15]](#footnote-15) The importance of cumulative effects on marine fauna of factors such as ship strikes, ship noise, gas emissions, chemical spill and introduced pests have been highlighted in different studies.[[16]](#footnote-16)

To prevent the degradation of the high seas biodiversity hotspots and increase resilience to the effects of climate change, several reports have suggested reducing the pressures represented by shipping and other human activities.[[17]](#footnote-17) Proposals on measures to reduce shipping in the most sensitive areas include adjusting shipping lanes and routeing measures, as well as prohibiting types of vessels in certain areas.[[18]](#footnote-18) Commonly, such measures are proposed as part of a broader package of restrictions, encompassing different maritime activities, by establishing networks of marine protected areas (mpa s).[[19]](#footnote-19) There are a range of formal definitions of mpa s, but the most widely used is from the World Conservation Union, which defines an mpa as *parts of intertidal or subtidal environments, together with their overlying waters, flora and fauna and other features, that have been reserved and protected by law or other effective means*.[[20]](#footnote-20) Some marine waters, including high seas areas, are already encompassed by mpa rules. With few exceptions, such measures have been limited to singular sectors, lacking coordination with other uses of the seas.[[21]](#footnote-21) In some regional contexts, notably in the North East Atlantic, ambitious efforts to establish cross-sectoral mpa have been undertaken.[[22]](#footnote-22) However, in lack of global recognition of such measures the practical effect has been limited.[[23]](#footnote-23) This has led many observers to conclude that it is necessary to adopt new rules in international law, to provide a solid legal basis for globally recognised mpa s in the high seas.[[24]](#footnote-24)

These calls have in recent years met increasing political support. At global level, new objectives have been agreed to protect biodiversity in life below water, most importantly in Goal 14 of the United Nations Sustainable Development Goals (sdg s).[[25]](#footnote-25) Its indicators (target 14.5) explicitly call for the setting up of marine protected areas and protect marine ecosystem from adverse impacts, declaring that by 2020, at least 10 per cent of coastal and marine areas should be conserved, consistent with national and international law and based on the best available scientific information.[[26]](#footnote-26) The objectives under sdg 14 are closely connected to and creates an impetus for developments in international environmental law and the law of the sea which have been underway for a long time but so far not fully materialised.

The Convention on Biological Diversity[[27]](#footnote-27) (cbd) already by its entry into force in 1993 imposed an obligation on States to establish systems of protected areas or areas where special measures need to be taken to conserve biological diversity.[[28]](#footnote-28) This objective was further specified in the so-called Aichi targets of 2010,[[29]](#footnote-29) which declared in its objective 11 that at least 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, by 2020 should be conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Whereas the 1982 UN Convention on the Law of the Sea (unclos)[[30]](#footnote-30) establishes a general obligation to protect the marine environment and cooperate to that end, it contains no specific obligation to establish mpa s.[[31]](#footnote-31) Other law of the sea instruments provide rules for applying sectoral restrictions in specific areas based on environmental considerations. But due to the fragmented nature of the legal framework, establishing integrated mpa s, which involve restrictions on different uses of the seas for the same area is challenging. In spite of calls for holistic approaches in the preamble of unclos and the increasing recognition of the importance to consider cumulative impacts on the marine environment, different uses of the seas remain regulated and managed in isolation, under individual rules, procedures and institutions, with limited regard for the need to coordinate measures across sectors and areas.[[32]](#footnote-32) Moreover, the complex jurisdictional framework of unclos raises difficulties to integrated approaches. The convention divides the seas into maritime zones with exclusive and sovereign rights for coastal States while maintaining flag state jurisdiction and the right of innocent passage for ships. Beyond the territorial seas of coastal States, the principles of high seas freedoms, including *inter alia* the freedom of navigation apply and may be exercised equally by all States. If a State or group of States were to declare a high seas mpa within the framework of unclos, this could only be legally binding on those nations setting up the mpa in line with the *pacta tertiis* principle. As observed by Drankier ‘*The point of departure for regulating, or restricting, high seas freedoms would thus logically seem to be that they require the involvement of the international community as a whole.*’[[33]](#footnote-33)

As a result of this perceived gap in unclos regarding, i.a. rules on high seas mpa s, negotiation of new law of the sea rules have been initiated and ongoing in different forms for over a decade. The expected new implementing agreement under the United Nations Convention on the Law of the Sea for biological diversity beyond national jurisdiction (bbnj) includes, as a central component, the ambition to establish rules for establishing globally recognized mpa s in the high seas.[[34]](#footnote-34) The negotiation is set to have its fourth and final intergovernmental conference meeting early in 2022.[[35]](#footnote-35)

There is thus both a political momentum and ongoing regulatory developments for high seas mpa s. This calls for examining how such measures, especially the draft rules under the expected bbnj treaty, are likely to affect shipping. It appears clear that the imo and its instruments have a central role in this development, but it remains unclear how it will unfold.

3 High Seas Marine Protected Areas Under the New bbnj Treaty

How then, will the rules for high seas mpa s under the new bbnj agreement be modelled? It is likely that the agreement will not merely establish new multilateral procedures for establishing mpa s in the high seas and the Area. Rather, it is expected to attempt to integrate and build on the mandate of pre-existing structures regulating activities carried out in these areas. The draft negotiation text sets as an objective for the treaty to promote a holistic and cross-sectoral approach to ocean management by enhancing cooperation and coordination in the use of area-based management tools, including mpa s, among States, relevant legal instruments and frameworks as well as relevant global, regional, sub-regional and sectoral organizations.[[36]](#footnote-36) The new treaty thus aims to function as a vehicle for setting up new mpa s, but not primarily by establishing new forms for protection, but rather by coordinating and integrating tools under pre-existing structures. This implies a call upon all relevant organizations to make contributions to the mpa objective of the new treaty, by applying rules under their respective mandates relevant for areal protection. In the fragmented system of management under the law of the sea, a broad range of organizations have developed measures which are relevant in this context. For instance, in regional fisheries management organizations, member States have the mandate to make decisions on areas closed for fisheries, including in the high seas.[[37]](#footnote-37) In the International Whaling Commission, States can make decisions on whale sanctuaries.[[38]](#footnote-38) As regards shipping, the imo is expected to become a central player in this work by virtue of its function as the global agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships.

Based on its regulatory mandate the imo has the ability to enact global rules for the prevention of marine pollution by ships, including far-reaching measures to prevent the detrimental impact of shipping on sensitive marine areas.[[39]](#footnote-39) This role of the imo is not self-imposed, but builds on unclos, which bestows the organization and its instruments with unique possibilities to make exceptions from one of the most central principles of the law of the sea, the freedom of navigation. Of central relevance to the objective of the new bbnj treaty to create integrated and cross-sectoral mpa s is that the imo may adopt regulatory measures limiting shipping in certain areas based on environmental considerations.

4 The Freedom of Navigation and the imo

The ability of the imo to restrict shipping in certain areas is based on its unique mandate to impose restrictions on navigational freedoms. In all sea areas save for the territorial sea where the right of innocent passage applies, shipping is legally conducted based on the freedom of navigation. This fundamental principle of the law of the sea, which dates back to Grotius’ *Mare Liberum* dictum of the early modern period, was reiterated in unclos. It follows from the Convention’s central Article 87 that the freedoms of the high seas comprise, *inter alia*, freedom of navigation both for coastal and land-locked States.[[40]](#footnote-40) The freedom of navigation is however not without limitations. Under the law of the sea, the nationality of ships is decided based on the flag they are entitled to fly.[[41]](#footnote-41) The flag state has the duty to effectively exercise jurisdiction over ships under its flag, including ensuring safety regarding construction, equipment and seaworthiness.[[42]](#footnote-42) These obligations include requirements for States, acting through the competent international organization or general diplomatic conference, to establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels and promote the adoption, in the same manner, wherever appropriate, of routeing systems designed to minimize the threat of accidents which might cause pollution of the marine environment as well as ensure conformity with generally accepted international regulations, procedures and practices and to take any steps which may be necessary to secure their observance.[[43]](#footnote-43) These provisions are widely interpreted as an implicit delegation to the imo and its shipping rules and standards. By virtue of these references to international rules and standards, unclos makes it mandatory for the flag state to ensure that ships under its flag observes the *lex specialis* rules of the International Convention for the Prevention of Pollution from Ships (marpol),[[44]](#footnote-44) the International Convention for the Safety of Life At Sea (solas)[[45]](#footnote-45) and other imo instruments, which effectively function as global rules.

The detailed technical requirements on environmental standards and performance for ships which are provided by marpol thereby effectively have binding effect on all flag States, and can be considered as global standards. In addition to the generally applicable rules and standards, imo has developed two concepts based on the rules in marpol and solas which enable the setting of stricter environmental standards or even suspend shipping in certain sea areas based on environmental concerns.

5 Area-based Measures Under the imo

Firstly, *Special Areas* based on marpol Annexes i, ii and v as well as SOx Emission Control Areas (seca s) under marpol Annex vi enable the introduction of more stringent rules by “*the adoption of special mandatory methods for the prevention of sea pollution by oil, noxious liquid substances, or garbage*”.[[46]](#footnote-46) Guidelines for the designation of special areas were first included in chapter 2 of Annex to Resolution A.720(17), adopted by the imo Assembly in November 1991, and subsequently superseded by the new 2001 Guidelines, included in Annex I to Resolution A.927(22).[[47]](#footnote-47) There is nothing indicating that Special Areas may not encompass high seas areas.[[48]](#footnote-48) Yet most of the Special Areas adopted so far lie within marine areas under national jurisdiction. There are however also examples of Special Areas that include areas of the high seas, such as the Mediterranean Sea (Annex i and v) and the Antarctic Special Area (Annex i, ii and v).[[49]](#footnote-49) Compared to most other area-based measures, Special Areas have a far-reaching scope of application. Applied measures are binding in relation to all States, including those that are not parties to marpol. This is because they are considered as reflecting generally accepted international rules and standards, as provided in unclos Article 211(5).[[50]](#footnote-50)

In spite of the global scope of application, the practical importance of Special Areas has come to decrease over the years, at least in relative terms. Whereas the discharge standards outside Special Areas gradually have been strengthened, no corresponding strengthening of the standards within the Special Areas has occurred. This has led several observers to conclude that the legal significance of the concept has declined.[[51]](#footnote-51) If Special Areas arguably are becoming outdated, a second concept for areal protection under imo, *Particularly Sensitive Sea Area* (pssa), has a larger and more diverse number of measures available to protect vulnerable sea areas in relation to potential damage caused by shipping activities.[[52]](#footnote-52) The pssa concept was gradually developed in a series of imo Resolutions from 1978 to 2005.[[53]](#footnote-53)

pssa s are procedurally less complicated to declare compared to Special Areas.[[54]](#footnote-54) Whereas a Special Area requires amending marpol 73/78, it suffices with a decision by the imo Marine Environment Protection Committee (mepc) to declare a pssa. pssa s must have a legal basis, but not necessarily in an imo instrument.[[55]](#footnote-55) Similarly, the criteria for declaring a pssa are less complicated compared to special areas. A pssa should fulfil *either* ecological, socio-cultural-economic or scientific-educational criteria. For Special Areas, three *cumulative* criteria must be fulfilled.[[56]](#footnote-56)

Moreover, also from a spatial standpoint pssa s are flexible. Although applications for pssa s only may be submitted by one or several States having an “interest” in a particular area, there is no geographic limitation such as proximity requirements on what sea areas States can include in a proposal. In order to protect a sensitive area from shipping, specific measures in a pssa may also apply in a connecting buffer zone.[[57]](#footnote-57) Since the imo Convention as well as the Revised pssa Guidelines and the marpol Convention with its relevant annexes apply to all maritime zones, there is nothing preventing the imo from declaring pssa s in the high seas.[[58]](#footnote-58) Out of the current pssa s designated by the imo, none however so far incorporates high seas areas.

The specific regulations of a pssa, referred to as Associated Protective Measures (apm s) must be identified and submitted within two years of the decision to declare a pssa.[[59]](#footnote-59) Once a proposal for a pssa has been approved, the associated protective measures are recorded on charts under the procedures of the International Hydrographic Organization. imo member States are thereafter under obligation to “take all appropriate steps to ensure that vessels flying their flag comply with the associated protective measures adopted to protect the designated pssa”.[[60]](#footnote-60) As with any restriction in the high seas, implementation of pssa measures would rely heavily on flag state monitoring and enforcement.

apm s may, inter alia, include ships’ routeing measures, discharge restrictions and prohibited activities, “*and should be specifically tailored to meet the need of the area to prevent, reduce, or eliminate the identified vulnerability of the area from international shipping activities*”.[[61]](#footnote-61) There is thus no direct limitation on what restrictions apm s may involve. In spite of the extensive range of possible measures, the ambition to balance environmental protection with shipping interests has resulted in rather modest protection for the pssa s which have been adopted.[[62]](#footnote-62) Evaluations of imo practice also suggests that the designation of an area as pssa so far has not had any particular effect on routing measures compared to such measures adopted directly under solas.[[63]](#footnote-63) Overall, the list of mandatory routing measures so far adopted under pssa s is also quite limited.[[64]](#footnote-64) Important components of the pssa concept also make clear that environmental interests are not unconditional. States with ships in pssa areas may bring concerns with associated measures to the imo “*so that necessary adjustments can be made”.*[[65]](#footnote-65)

In conclusion, only minor parts of the full scale of possible pssa measures so far have been applied. Use of the concept also lacks precedence in the high seas. But based on its potential, pssa appears to be a considerably more flexible and suitable tool than Special Areas for regulating shipping in high seas mpa s.

6 Role of Sectoral Organisations Under the bbnj Treaty

It has thus been concluded that rather than establishing competing structures, the bbnj treaty will attempt to establish high seas mpa s by integrating and coordinating area-based measures of different sectoral instruments. Moreover, the imo has the possibility to declare such measures. In particular, by representing the most dynamic and flexible tool for imposing restrictions on shipping in sensitive areas, declarations of pssa s would make a central component of high seas mpa s. How then is the new bbnj treaty likely to involve and cooperate with other organisations?

The draft negotiation text of the bbnj treaty indicates that mpa proposals should be submitted by state parties to a secretariat set up under the treaty. The secretariat should then facilitate consultation with States as well as relevant organisations. The draft text does neither suggest that the bbnj conference of parties nor its secretariat should be able to instruct other organisations to use tools or measures at their disposal to promote mpa proposals.[[66]](#footnote-66) Rather, according to the draft Article 18(b) on *Consultation on and assessments of proposals*, relevant organisations should be invited to submit their views regarding “*the merits of the proposal*” (i) and “*information regarding existing measures for the relevant area*” (iii) (v) as well as “*any aspects of the conservation and management measures identified in the proposal that fall within the competence of that body*“ (iv); and “*any relevant additional measures that fall within the competence of that instrument, framework or body*”. According to this language, there is nothing indicating an ambition to overlap with the mandate of existing organisations, such as the imo. Rather, it appears that the bbnj treaty will leave to imo members to decide on whether or not to contribute to mpa proposals under the new treaty by applying measures under their rules, such as declaring relevant areas as pssa s. Similarly, according to the draft Article 19 on *Decision-making*, the bbnj treaty conference of parties should take decisions on mpa s “*while respecting [existing] relevant legal instruments and frameworks and relevant global, regional and sectoral bodies*”. Interestingly, however, States have expressed different positions in the negotiations on how to reach out to existing organisations with relevant legal instruments once a mpa has been decided under the bbnj treaty. A first proposal suggests that the bbnj cop should decide whether to recommend to its parties to “*promote the adoption of relevant measures through such instruments, frameworks and bodies, in accordance with their respective mandates* (and) *“Whether to adopt measures complementary to those adopted under such instruments, frameworks and bodies;*”. (Article 19 Alt 1 (c) (i–ii)). This suggests that an element of leverage could be exercised in relation to organisations such as the imo based on bbnj conference decisions, and that there even may be possibilities for deciding on measures which go further than what would be possible under the pssa concept.

A second proposal appears to be more cautious not to conflict with the mandate of other organisations, suggesting that the bbnj conference shall take decisions with respect to “*Recommendations relating to the implementation of related management measures, while recognizing the primary authority for the adoption of such measures within the respective mandates of [existing] relevant legal instruments and frameworks and relevant global, regional and sectoral bodies;*” (Article 19 Alt 2 (c)).

Furthermore, under the draft Article 20 on *Implementation*, which underlines the flag state principle for ensuring compliance and enforcement of treaty measures in line with unclos, State parties are also instructed to promote the adoption of measures within relevant instruments and organizations to support the implementation of mpa measures.

Taken together, setting up networks of mpa s is one of the primary objectives of the new bbnj treaty. However, this objective cannot be achieved based on this treaty alone. Rather, it requires cooperation with other organisations which are able to make decisions on necessary area-based measures. Based on the draft text of the bbnj treaty, the relationship to other organisations appears likely to be complex. The exclusive mandate of other instruments is more or less respected. Sectoral organisations are also able to get involved in consultation procedures on new proposals. However, once a proposal to establish a mpa has been approved under the new bbnj treaty, an element of pressure seems to be introduced in relation to other organisations to make contributions to the implementation of the decision by applying measures under their mandate, at least according to one of the text proposals. Considering that shipping is considered a significant stressor on the high seas environment and traffic could be prevented in sensitive areas by declaring pssa s, it is likely that calls for cooperation would be particularly forceful in relation to the imo.

How then is the relation and cooperation between the bbnj treaty and the imo likely to unfold? Can we expect a proliferation of restrictions of high seas shipping as the result of the new treaty? In order to assess how the imo would position itself in relation to such requests, it is relevant to study what role the organisation has taken in the bbnj negotiations. It similarly calls for evaluating how previous proposals of pssa s have been received, as well as the success of other cases of cooperation between organisations in establishing cross-sectoral mpa s in the high seas.

7 Involvement of the imo in Establishing High Seas mpa s

The Secretariat of the imo has participated throughout bbnj negotiations, informing on relevant measures including pssa s, while underlining that the bbnj treaty ought not to inflict on the imo mandate.[[67]](#footnote-67) There also appears to be widespread agreement among States involved that the new treaty should not override the mandate of other organisations. It thus appears that the risk of direct conflict between obligations under the new treaty and the imo mandate should not be exaggerated. In an analysis of the draft treaty text for its member States, the imo secretariat has nevertheless voiced concerns in relation to some of the proposals. The secretariat has also asked imo Member States to ensure that positions at the bbnj Conference are in line with their interests at the imo.[[68]](#footnote-68) There is thus no doubt that the imo is cautious to ensure that the bbnj treaty leaves its autonomy to make decisions on pssa s intact.

An analysis of previous proposals for pssa s indicate that States generally have been reluctant to accept far-reaching and mandatory measures. As previously discussed, the list of decided routing measures under pssa s is so far modest. When ambitious proposals have been made, they have been met with reluctance. The proposal for the Baltic pssa included mandatory areas to be avoided.[[69]](#footnote-69) In spite of an advanced motivation for the proposal relating to this ecosystem, described as “*globally unique and sensitive*”, the Sub-Committee on Safety of Navigation concluded that it did not justify the establishment of mandatory areas to be avoided.[[70]](#footnote-70) Instead, only a recommendation was approved.[[71]](#footnote-71) This decision has been interpreted as the result of insufficient information and argument for the proposal.[[72]](#footnote-72) The opposition could however also reflect a general objection to measures infringing on the freedom of navigation. Similarly, a proposal for mandatory use of pilot in the Torres Strait was rejected. As a result, only a recommendation was adopted.[[73]](#footnote-73) A proposal for banning single hull vessels carrying dangerous cargo in the Western European pssa was also met with considerable opposition and was altogether withdrawn.[[74]](#footnote-74)

There is also legal support for opposing proposals for mandatory measures. It follows from the General Provisions on Ships’ Routeing that imo will not adopt a proposed routing measure, unless it is clear that the measure will not impose “unnecessary constraints on shipping”.[[75]](#footnote-75) Based on imo practice, it appears that the threshold for not being disqualified as “unnecessary” is set high. Based on the lukewarm reception such proposals so far have been met with, it appears unlikely that imo members would approve proposals for mandatory pssa measures in high seas mpa s under the new bbnj treaty. Recommendatory measures may have a better outlook. More indication on the likely role of imo in relation to the new bbnj treaty can be deduced from already existing high seas mpa s approved within regional contexts. ospar, the regional seas convention cooperation for the North East Atlantic, established in 2010 a network of mpa s amounting to a total of 285,000 km2 which encompasses High seas areas.[[76]](#footnote-76) This has been referred to as a pioneering cooperation between States and organisations in protecting vulnerable marine ecosystems beyond national jurisdiction.[[77]](#footnote-77) Since much of the preparatory work expected to be required under the new bbnj treaty has already been performed for these ospar mpa s, it is likely that these areas will be among the first to be proposed under the bbnj treaty.

The mpa measures established by ospar are based on the mandate in the ospar Convention to decrease different sources of pollution within its mandate area, which to 40 per cent is represented by High seas.[[78]](#footnote-78) This mandate in turn, connects to Article 197 of unclos, which calls for cooperation on a regional basis, in formulating and elaborating international rules, standards and recommendations. It has however been controversial whether this legal basis provides sufficient support for declaring mpa s.[[79]](#footnote-79) As a result, only a limited set of maritime activities are encompassed by the mpa restrictions.[[80]](#footnote-80) The implementation of specific conservation measures is left to the Contracting Parties and they only apply insofar ospar parties can assert jurisdiction in line with the flag state principle provided by unclos.[[81]](#footnote-81) As a consequence, some observers consider them merely as “paper mpa s” that should rather be regarded as recommendations than as legally binding measures. ospar has however declared in guideline documents that management plans should be established for the areas, including measures relating to e.g. shipping and navigation.[[82]](#footnote-82)

The ospar Commission also has explicit legal basis for cooperating and consulting with both fisheries organisations and the imo.[[83]](#footnote-83) Based on this mandate, a Memorandum of Understanding has been agreed with the North-East Atlantic Fisheries Commission (neafc) as well as an Agreement of Cooperation with the imo.[[84]](#footnote-84) Whereas the language of the understanding with neafc is relatively far-reaching, the agreement with imo is more general. It broadly mentions future cooperation and consultation, as well as mutual assistance.[[85]](#footnote-85) Accordingly, the cooperation with neafc has resulted in decisions on closed areas for fisheries which correspond with the ospar mpa s. The imo, on the other hand, has so far not taken any steps to declare the relevant areas as pssa s. Nor do they fall within existing Special Areas.

In recent years, the cooperation between ospar and neafc, referred to as collective arrangements, has developed. The collective arrangement is not a legally binding instrument but aims to foster cooperation and coordination in the development of appropriate measures for conservation and management of areas selected by different organisations.[[86]](#footnote-86) The arrangement was thus modelled to include all relevant organisations, not dissimilar to the bbnj treaty. imo has accordingly been invited to participate but has so far not actively participated in the arrangement.[[87]](#footnote-87)

The mpa work of ospar, and the outreach to neafc and imo has apparent similarities with the function of the bbnj treaty, as it is modelled in the draft texts. It may thus provide an indication of how cooperation will be carried out under the new bbnj treaty. Based on the experience of the limited imo involvement in this regional project, it appears far from certain that proposals to apply pssa measures for high seas mpa s under the bbnj treaty will gain acceptance by imo members.

8. Possible Ways to Foster Cooperation

The bbnj treaty is expected to provide a legal basis for establishing high seas mpa s, which already is called for under sdg 14 as well as the cbd Aichi targets. It is difficult to foresee if the adoption of the treaty will influence the imo to adopt a more positive stance on applying pssa measures as contribution to high seas mpa s than what has been shown in previous cases. One way to promote a more inclusive approach and foster cooperation could be to complement the approach whereby proposals for mpa s hitherto have been brought.

In previous and existing mpa proposals, focus in preparatory material has been limited to assessments of biological aspects. Analysis and reflection on broader implications of suggested measures have with limited exceptions been lacking. Considerations of important elements for shipping, such as how proposed mpa-related routing measures would influence voyage times, are not called for in relevant guidelines and have so far been missing in descriptions of proposals. This is evident in the Guidelines for mpa s under ospar, which set out detailed criteria which may appear comprehensive, but lack calls for assessing the impact on affected sectors.[[88]](#footnote-88) It is even more noteworthy that pssa proposals in the imo context have not included analysis on consequences for the shipping sector of suggested restrictions.[[89]](#footnote-89)

Both routing measures such as deep-water routes and areas to be avoided, as well as general restrictions for certain sea areas typically result in longer shipping routes. Evaluating what general economic impact such measures would have, in particular on fuel-consumption and voyage times, would not be complicated to carry out. Previous studies have developed methodologies which could be applied in different cases.[[90]](#footnote-90)

Complementing preparatory material of high seas marine protected area proposals with such information would have several advantages. For the shipping sector it would provide reassurances on potential costs involved and enable a less speculative discussion on the implications. In many of the previous proposals discussed, suggested pssa measures would have involved only limited increases in distances. Nevertheless, they have been considered controversial by some States. It is possible that accurate cost-estimates could alleviate such fears.

Moreover, economic assessment of proposed measures would provide valuable information also in other contexts. It could cast light on potential conflicts between goals relating on the one hand to the protection of ecologically sensitive marine areas and, on the other hand, to reducing the climate impact of shipping as called for by the Initial imo strategy on the reduction of greenhouse gas emissions from ships. So far, emission increases resulting from obligations for shipping to circumvent protected areas have been little considered and ought similarly to be better explored in order to facilitate more nuanced and efficient approaches.

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25. sdg 14: *Conserve and sustainably use the oceans, seas and marine resources for sustainable development.* [↑](#footnote-ref-25)
26. See primarily indicator 14.5 “*By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.*” Indicator 14.2 is also relevant in this context “*By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.*”, *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*, adopted by the General Assembly on 6 July (2017a/res/71/313). [↑](#footnote-ref-26)
27. *Convention on Biological Diversity*, done in Rio de Janeiro, 5 June 1992, in force 29 December 1993, 1760 unts 79. (cbd). [↑](#footnote-ref-27)
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29. Convention on Biological Diversity, *Convention on Biological Diversity’s Strategic Plan for 2020* (Montreal 2010). Available at: <www.cbd.int/sp> accessed 26 August 2020. [↑](#footnote-ref-29)
30. *The United Nations Convention on the Law of the Sea*, (adopted December 10, 1982 entered into force November 16, 1994) 1833 unts. 397 (unclos). [↑](#footnote-ref-30)
31. Part xii of unclos establishes, inter alia, general obligations for the protection and preservation of the marine environment. Art 192 provides that ‘*States have the obligation to protect and preserve the marine environment*.’ Art194(5) prescribes that ‘*The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life*.’ Art 197 provides that ’*States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.*’ [↑](#footnote-ref-31)
32. Although the convention sets out in its preamble that ‘*the problems of ocean space are closely inter-related and need to be considered as a whole’*, the convention provides little support for adopting integrated approaches across different maritime sectors. Richard Barnes, *The Law of the Sea Convention and the Integrated Regulation of the Oceans*. The International Journal of Marine and Coastal Law, 27(4) (2012), 859–866. See also Alex Oude Elferink, *Governance Principles for Areas beyond National Jurisdiction*. The International Journal of Marine and Coastal Law, 27(2) (2012), 205–259. [↑](#footnote-ref-32)
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34. unga Res. A/75/L.96 of 19 January 2018, 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. The draft but not yet agreed negotiation text sets out as an objective in Art 14(d) to “*Establish a system of ecologically representative marine protected areas that are connected (and effectively and equitably managed);*”, “*Revised draft text of an 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*”, (a/conf.232/2020/3, 18 November 2019), available at: <https://undocs.org/en/a/conf.232/2020/3> accessed 26 August 2020). [↑](#footnote-ref-34)
35. unga Res. A/75/L.96 of 9 June 2021, *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*. [↑](#footnote-ref-35)
36. Art 14(a) of the proposed treaty text sets out as an objective to “*Enhance cooperation and coordination in the use of area-based management tools, including marine protected areas, among States, relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies, which will also promote a holistic and cross-sectoral approach to (ocean management) (conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction)”*. [↑](#footnote-ref-36)
37. See, for instance Art 5 of the Convention on Future Multilateral Cooperation in North-East Atlantic Fisheries, adopted in London 18 November 1980 (neafc Convention), which enables the organization to make recommendations by qualified majority concerning fisheries conducted beyond the areas under jurisdiction of Contracting Parties. [↑](#footnote-ref-37)
38. See Arts iii and v of the International Convention for the Regulation of Whaling, adopted in Washington, 2 December 1946, unts Volume Number 161 (p.72), which similarly enables the decision of whale sanctuaries by qualified majority. [↑](#footnote-ref-38)
39. The purposes of the imo, as stated in Art1(a) of the imo Convention, are “*to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships*”, Convention on the International Maritime Organization Geneva, 6 March 1948, United Nations, Treaty Series, vol. 289, p. 3, and vol. 1520, p. 297. [↑](#footnote-ref-39)
40. According to Art58 this freedom applies not only in the international waters of the High Seas, but also *mutatis mutandis* in the Exclusive Economic Zones (eez) of coastal States. unclos provides a regime of duality in the eez, where exclusive coastal State rights to economic resources are balanced with high seas freedoms. [↑](#footnote-ref-40)
41. Art 91. [↑](#footnote-ref-41)
42. Art 94. [↑](#footnote-ref-42)
43. Arts 94 and 211. [↑](#footnote-ref-43)
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45. International Convention for the Safety of Life At Sea, 1 November 1974, 1184 unts 3. [↑](#footnote-ref-45)
46. Annex i: Prevention of pollution by oil; Annex ii: Control of pollution by noxious liquid substances; Annex v: Prevention of pollution by garbage from ships; Annex vi: Regulations for the prevention of air pollution from ships. See also Paragraph 2.1 of Resolution A.927(22). [↑](#footnote-ref-46)
47. imo, *Guidelines for the Designation of Special Areas and the Identification of Particularly Sensitive Sea Areas*, Resolution A.720(17), Adopted 6 November 1991. Available at: <www. imo.org/blast/blastDataHelper.asp?data\_id=22581&filename=A720(17).pdf>; Drankier (n 21), 291–350. [↑](#footnote-ref-47)
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50. Jakobsen (n 49) 388. [↑](#footnote-ref-50)
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52. Drankier (n 21); Helene Lefebvre-Chalain, *Fifteen Years of Particularly Sensitive Sea Areas: A Concept in Development*, Ocean and Coastal Law Journal, 13/1 (2007), 59; Markus J. Kachel, *Particularly Sensitive Sea Areas: The IMO’s Role in Protecting Vulnerable Marine Areas* (13; Berlin, Heidelberg: Springer, 2008). 97. [↑](#footnote-ref-52)
53. See imo Resolution A.720(17), *Guidelines for the Designation of Special Areas and the Identification of Particularly Sensitive Sea Areas*, Resolution A.720(17), Adopted 6 November 1991. Available at: <www.imo.org/blast/blastDataHelper.asp?data\_id=22581&filename=A720(17).pdf> accessed 10 September 2020. These Guidelines were subsequently revised in 1999 by imo Resolution A.885(21), *Procedures for the Identification of Particularly Sensitive Sea Areas and the Adoption of Associated Protective Measures and Amendments to the Guidelines Contained in Resolution A.720(17),* adopted 25 November 1999, available at: <www.imo.org/blast/blastDataHelper.asp?data\_id=24275&filename=885(21).PDF> accessed 10 September 2020.

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54. As observed by Drankier, a considerable legal difference between a pssa and a marpol 73/78 special area is that whereas a pssa may be designated or amended by the imo Assembly, on recommendation of the The Marine Environment Protection Committee (mepc), the designation or amendment of a special area is in effect an amendment to marpol 73/78 itself and its respective annex., Drankier (n 21). [↑](#footnote-ref-54)
55. If the proposed apm s “*are not already available in an imo instrument, information must be provided with regard to its legal basis and/or steps that the proposing Member Government has taken or will take to establish the legal basis*”, see Paragraph 7.5.2.2 of Resolution imo Resolution A.982(24), *Revised Guidelines for the Identification and Designation of Particularly Sensitive Areas.* [↑](#footnote-ref-55)
56. The cumulative criteria are oceanographic, ecological, and vessel traffic characteristics. Within these criteria, there are however alternative sub-criteria. The ecological conditions of an area are: Conditions indicating that protection of the area from harmful substances is needed to preserve: (1) depleted, threatened or endangered marine species; (2) areas of high natural productivity (such as fronts, upwelling areas, gyres); (3) spawning, breeding and nursery areas for important marine species and areas representing migratory routes for sea-birds and marine mammals; (4) rare and fragile ecosystems such as coral reefs, mangroves, seagrass beds and wetlands; and (5) critical habitats for marine resources including fish stocks and/or areas of critical importance for the support of large marine ecosystems. [↑](#footnote-ref-56)
57. ibid para. 6.3. [↑](#footnote-ref-57)
58. ibid para. 4.3, Siân Prior, Aldo Chircop, and Julian Roberts, *Area-Based Management on the High Seas: Possible Application of the IMO’s Particularly Sensitive Sea Area Concept*, The International Journal of Marine and Coastal Law, 25/4 (2010), 483–522. See also Veronica Frank, *The European Community and Marine Environmental Protection in the International Law of the Sea: Implementing Global Obligations at the Regional Level* (Boston: Martinus Nijhoff Publishers, 2007), 370–371, 370–371; Kristina M. Gjerde and Anna Rulska-Domino, *Marine Protected Areas Beyond National Jurisdiction: Some Practical Perspectives for Moving Ahead*, The International Journal of Marine and Coastal Law, 27/2 (2012), 351–73. [↑](#footnote-ref-58)
59. See Para. 4.3.4 of Resolution A.885(21); Para. 7.1 of Resolution A.927(22); Para. 1.2 and 7.1 of Resolution A.982(24). [↑](#footnote-ref-59)
60. Resolution imo Resolution A.982(24), *Revised Guidelines for the Identification and Designation of Particularly Sensitive Areas*, 4–5. [↑](#footnote-ref-60)
61. Para. 7.5.2.4 of Resolution A.982(24). [↑](#footnote-ref-61)
62. Lefebvre-Chalain (n 52) 55. [↑](#footnote-ref-62)
63. Jakobsen (n 49) 398; Tore Henriksen, *Conservation of marine biodiversity and the International Maritime Organization*, in Christina Voigt (ed.), *Rule of Law for Nature: New Dimensions and Ideas in Environmental Law* (2013), 341–342. [↑](#footnote-ref-63)
64. Kachel (n 52) 195. [↑](#footnote-ref-64)
65. See paragraph 8.4 of imo Resolution A.982(24), *Revised Guidelines for the Identification and Designation of Particularly Sensitive Areas*. [↑](#footnote-ref-65)
66. *Revised draft text of an 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*”, (18 November 2019, a/conf.232/2020/3). Available at: <https://undocs.org/en/a/conf.232/2020/3> accessed 10 September 2020. [↑](#footnote-ref-66)
67. *Update on the UN conference on marine biodiversity of areas beyond national jurisdiction (BBNJ)”, Information session for imo Member States, 21 June 2019*. Available at: <www.imo.org/en/OurWork/Legal/Documents/Presentation%20-%20information%20session%20BBNJ%20-%2021-06-19.pptx> accessed 10 September 2020. [↑](#footnote-ref-67)
68. *Update on the legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (bbnj)*. Available at: <www.imo.org/en/OurWork/Legal/Documents/Presentation%20at%20A%2031%20December%202019.pptx> accessed 10 September 2020. [↑](#footnote-ref-68)
69. imo mepc Resolution 136(53), *Designation of the Baltic Sea Area as a Particularly Sensitive Sea Area,* Adopted 22 July 2005*.* Available at: <www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Marine-Environment-Protection-Committee-%28MEPC%29/Documents/MEPC.136%2853%29.pdf> accessed 10 September 2020. [↑](#footnote-ref-69)
70. imo Sub-Committee on Safety of Navigation nav 51/19, para. 3.50. [↑](#footnote-ref-70)
71. ibid, para. 3.51., Jakobsen (n 49) 399. [↑](#footnote-ref-71)
72. Prior and others (n 58) 514. [↑](#footnote-ref-72)
73. Robert C. Beckman, *PSSAs and Transit Passage-Australia’s Pilotage System in the Torres Strait Challenges the IMO and UNCLOS*, Ocean Development & International Law, 38/4 (2007), 325–57. [↑](#footnote-ref-73)
74. Jakobsen (n 49) 399. [↑](#footnote-ref-74)
75. See paras. 3.5.1., 3.5.6–7., imo, Resolution A.572(14), *General Provisions on Ships’ Routeing,* adopted on 20 November 1985. Available at: <www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Assembly/Documents/A.572(14).pdf> accessed 10 September 2020. [↑](#footnote-ref-75)
76. These are the southern Charlie-Gibbs Fracture Zone, the Milne Seamount Complex, the Altair, Anitaltair and Josephine Seamounts as well as the Mid-Atlantic Ridge north of the Azores, see ospar recommendation 2003/3 of 27th June 2003. Available at: <www.ospar.org/documents/dbase/decrecs/recommendations/or03-03e.doc> accessed 10 September 2020; Bethan C. O’Leary and others (n 13) 598–605. [↑](#footnote-ref-76)
77. See ospar press notice of 26 June 2008 ospar pioneers the protection of the high seas, ospar on track to meet the new EU marine directive. Available at: <www.ospar.org/news/ospar-pioneers-the-protection-of-the-high-seas-ospar-on-track-to-meet-the-new-eu-marine-directive> accessed 10 September 2020; Molenaar & Oude Elferink (n 22),, 5–515x. [↑](#footnote-ref-77)
78. The definition of the term “maritime area” in Art. 1 (a) OSPAR expressly comprises not only areas under national jurisdiction but also those on the high seas. Contrary to this approach, most other regional treaties on marine environmental protection are confined to the territorial seas and the eez s of their States Parties. Beyond some specific obligations to reduce land-based pollution of the sea and pollution by dumping, incineration and from offshore sources in Arts. 3–5 ospar, Art. 2 (1) of the ospar Convention generally requires parties to preserve and restore the “maritime area”., Convention for the Protection of the Marine Environment of the North-East Atlantic (the ‘ospar Convention’) unts. 2354, Available at: <www.ospar.org/convention/text> accessed 10 September 2020. [↑](#footnote-ref-78)
79. Nele Matz-Lück and Johannes Fuchs, *The Impact of Ospar on Protected Area Management Beyond National Jurisdiction: Effective Regional Cooperation or a Network of Paper Parks?*, Marine policy, 49 (2014), 155–66, ibid. [↑](#footnote-ref-79)
80. The ospar document whereby it discusses its mandate lists in para. 2.23 ”scientific research, cable laying, dumping (and) construction of installations and artificial islands, and deep-sea tourism as the only examples”, see ospar Commission. ospar’s regulatory regime for establishing Marine Protected Areas (mpa s) in Areas Beyond National Jurisdiction (abnj) of the ospar maritime area. In: meeting of the ospar Commission Brussels: 22–26 June 2009. Summary record 2009 ospar 09/22/1-E, Annex 6. (Ref. §6.13c). Available at: <www.ospar.org/site/assets/files/33747/annex06\_jl\_advice\_on\_abnj.doc> accessed 10 September 2020. [↑](#footnote-ref-80)
81. In principle nothing under general international law prevents States from restricting the activities of their vessels or natural and legal persons in certain abnj or the maritime zones of other Sates. This follows from the general principle *pacta tertiis nec nocent nec prosunt* (a treaty binds the parties and only the parties; it does not create obligations for a third State). [↑](#footnote-ref-81)
82. ospar Agreement 2003–18, *Guidelines for the Management of Marine Protected Areas in the OSPAR Maritime Area*. Available at: <www.ospar.org/documents?d=32690> accessed 10 September 2020. [↑](#footnote-ref-82)
83. See Arts 4(1–2) of Annex v of the ospar Convention. [↑](#footnote-ref-83)
84. Available at: <www.ospar.org/about/international-cooperation/memoranda-of-understanding> accessed 10 September 2020. [↑](#footnote-ref-84)
85. ospar Agreement 2008–04, *Memorandum of understanding between the OSPAR Commission and NEAFC*, Adopted 5 September, 2008. Available at: <www.ospar.org/html\_documents/ospar/html/ mou\_neafc\_ospar.pdf> accessed 10 September 2020. [↑](#footnote-ref-85)
86. Danielle Smith and Julia Jabour, *MPAs in ABNJ: Lessons from Two High Seas Regimes*, ices Journal of Marine Science, 75/1 (2018), 417–25. [↑](#footnote-ref-86)
87. Julien Rochette and others, *The Regional Approach to the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction*, Marine policy, 49/C (2014), 109–17. [↑](#footnote-ref-87)
88. In the ospar guidelines for mpa s which outlines the steps to be followed in identifying potential new sites and the criteria which should be met. This includes an elaborate list of ecological and practical criteria to be considered. Whereas “*potential damage to the area by human activities*” is a central criterion, there appears to be no need to conversely consider the impact of proposed measures on human activities. See ospar, *Guidance for the development and management of the OSPAR network* available at: <www.ospar.org/work-areas/bdc/marine-protected-areas/guidance-for-the-development-and-management-of-the-ospar-network>accessed 10 September 2020. [↑](#footnote-ref-88)
89. See, for the Baltic Sea pssa, imo, mepc Resolution 136(53), *Designation of the Baltic Sea as a Particularly Sensitive Sea Area*,Adopted on 22 July 2005. Available at: <www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Marine-Environment-Protection-Committee-%28MEPC%29/Documents/MEPC.136%2853%29.pdf accessed 10 September 2020. For the Torres strait, see mepc Resolution 133(53) *Designation of the Torres Strait* as an extension of the Great Barrier Reef *Particularly Sensitive Sea Area*, Adopted on 22 July 2005. Available at: <www.imo.org/en/KnowledgeCentre/IndexofIMOResolutions/Marine-Environment-Protection-Committee-%28MEPC%29/Documents/MEPC.133%2853%29.pdf > accessed 10 September 2020. [↑](#footnote-ref-89)
90. See, for an inventory of relevant approaches, Marielle Christiansen and others, *Ship Routing and Scheduling in the New Millennium*, European journal of operational research, 228/3 (2013), 467–83. [↑](#footnote-ref-90)