

CALAMAR

Expert Paper

High Seas Working Group

23 May 2011



This project is funded by the European Union.



Authors

Lisa Speer (Co-Chair), Emanuel Gonçalves (Co-Chair), Jeff Ardron, Salvatore Arico, Peter Auster, Matthew Gianni, Kristina Gjerde, Dan Laffoley, Michael Lodge, Mike Orbach, Shirley Pomponi, Julien Rochette, Sebastian Unger

The presented recommendations were not arrived at by consensus and do not necessarily reflect the opinions of all authors or their organizations.

CALAMAR Project Team Support

Elena von Sperber, Ingrid Irigoyen, Mallorie Bruns, Jeff Allenby

About CALAMAR

The Cooperation Across the Atlantic for Marine Governance Integration (CALAMAR) project aimed to strengthen networks among key maritime stakeholders in the EU and US, and contribute policy recommendations to improve integration of maritime policies and promote transatlantic cooperation. The project convened a dialogue of more than 40 experts from both sides of the Atlantic. The CALAMAR project began in January 2010 and culminated in a final conference in Lisbon, Portugal on April 11-12, 2011 where the Working Groups' conclusions were presented. Two reports were developed to complement the dialogue by providing background information and assessments that: 1) compare EU and US maritime policy, and 2) identify opportunities and challenges for integrated maritime governance. A third report lays out policy recommendations for improved transatlantic cooperation in maritime governance based on the recommendations selected by the working groups throughout their discussions over the course of the CALAMAR project. The following report presents the conclusions of the CALAMAR High Seas Working Group. All project reports are available on the project website at the following link: <http://www.calamar-dialogue.org/>.

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I Introduction

The vast majority of the North Atlantic Ocean¹ is classified as “area beyond national jurisdiction,” or “ABNJ” and provides particular opportunities for cooperation between the European Union (EU) and the United States (US) in regards to conservation and sustainable use of resources. The economic and ecological values of ABNJ are substantial. Fishing and shipping in the Atlantic high seas generate hundreds of millions of dollars in revenue annually. Recent scientific discoveries reveal an enormous biodiversity in the open ocean and deep sea² associated to ecosystems such as seamounts, trenches and canyons, cold water corals, hydrothermal vents and much that remains to be explored and studied.

Rapidly advancing technology has opened major new scientific and commercial frontiers in the deep ocean beyond national jurisdiction in the Atlantic and elsewhere. Fishing, shipping, bio-prospecting, marine scientific research, geoengineering, including the possibility of deep-ocean CO₂ sequestration, minerals exploration and energy development are among the activities expanding or on the horizon. In addition, climate change is resulting in ocean warming, loss of polar ice, sea-level rise and shifting of species’ migratory ranges. Ocean acidification, caused by CO₂ emissions, is already measurable in many places. It is now expected to manifest most noticeably in the Arctic Ocean signaling the potential for wider changes in the North Atlantic ecosystems in the coming decades. Accumulated scientific understanding of the deep ocean is revealing a rich diversity of life that is often long-lived, slow-growing and spatially heterogeneous, and consequently less resilient to environmental shocks and stresses.

Management and governance of ABNJ in the North Atlantic lags far behind the management and governance systems in place for domestic waters of the US and the EU Member States. Both the US and the EU have detailed requirements for assessing the impacts, including cumulative impacts, of proposed activities in waters within their respective zones. These requirements are much more detailed and specific than the general obligation to conduct impact assessments contained in Articles 204 and 206 of the United Nations Convention on the Law of the Seas (UNCLOS).³ Similarly, within the waters of the US and EU, ecosystem-based management approaches can be used to minimize conflicts between users, maximize economic benefits and minimize environmental impacts on vulnerable species and communities. Integrated management tools, including integrated ocean and coastal management and marine spatial planning (MSP) are holistic tools which in recent years have resulted in enhanced governance schemes within the zones of national jurisdiction on both

¹ Defined in this paper as the Atlantic Ocean north of the equator.

² Recent ecological exploration and research has revealed many new species and a more detailed understanding of how diversity is distributed across the North Atlantic basin. For example, see results of the international studies of the Mid-Atlantic Ridge through the MAR-ECO program at <http://www.mar-eco.no/> and exploration of the Corner Rise and New England Seamounts at <http://oceanexplorer.noaa.gov/explorations/05stepstones/welcome.html> or the results of the Census of Marine Life, a 10-year international effort to assess the diversity, distribution, and abundance of marine life <http://www.coml.org>. The North Atlantic Basin is clearly not a homogeneous region but a complex of biogeographic zones (for deep sea corals, see Cairns SD and RE Chapman. 2001. Biogeographic affinities of the North Atlantic deep-water Scleractinia. In: Willison JHM, Hall J, Gass SE, Kenchington ELR, Butler M, Doherty P (eds) Proceedings of the First International Symposium on Deep-Sea Corals. Ecology Action Centre, Halifax, pp 30-57).

³ One institution covering one activity beyond national jurisdiction – deep seabed mining – does have detailed prior assessment requirements. Further examples of more descriptive assessments, although not binding law, can be found in UN Resolutions 61/105, 64/72 and the 2008 Guidelines as well as Annex 2 of the London Protocol.

sides of the Atlantic. This includes the authority to implement spatial management approaches that limit activities in particular areas and to establish fully protected marine reserves. For marine ABNJ the legal framework is much more complicated and less effective.

Strengthening and modernizing governance of ABNJ to more effectively address the growing spectrum of human activities occurring outside domestic waters, and to assess and prepare for consequences of these activities, is important to ensure conservation and sustainable use of the marine environment of the North Atlantic as a whole. Poorly regulated or unregulated activities can have long lasting impacts on vulnerable and important marine habitats, ecosystems and species, often affecting living marine resources within national jurisdictions. Proper management of activities in ABNJ is thus of paramount importance to the US and the EU. As this dialogue intended to focus on the opportunities for cooperation between the EU and the US with respect to high seas governance, it did not include other states in its scope. However it is important to broaden this debate beyond the North Atlantic and to include and cooperate with other states surrounding the Atlantic and the world's oceans.

2 Opportunities for Cooperation and Recommendations

There are a number of steps that realistically can be taken in the near-term, which would help develop a sound framework and/or platform for long-term transatlantic cooperation on ABNJ issues. These steps would first and foremost help modernize management of human activities in ABNJ, with associated benefits for the EU, the US, and other regional States.

In the following sections, opportunities and recommendations are set out in four main areas

- Prior Impact Assessment
- Identifying Ecologically and Biologically Significant Areas (EBSAs) and Vulnerable Marine Ecosystems (VMEs)
- Managing and protecting Ecologically and Biologically Significant Areas (EBSAs) and Vulnerable Marine Ecosystems (VMEs), including through the establishment of high seas marine protected areas (MPAs)
- High Seas Governance

3 Prior Impact Assessment

Prior impact assessment of human activities in the ocean is a fundamental and well-established process required by the EU and the US for many activities⁴ within their Exclusive Economic Zones (EEZs), as well as on the outer continental shelf.⁵ Assessment of activities which pose a risk of serious harm to the marine environment in ABNJ is increasingly a requirement of international legal instruments, including UNCLOS, the UN Fish Stocks Agreement⁶ and UN General Assembly Resolutions 61/105 and 64/72 (relating to bottom fisheries). The International Tribunal for the Law of the Sea recently affirmed that the obligation to conduct prior impact assessments can be regarded as not only an UNCLOS obligation but also a general requirement of customary international law. Nevertheless, even where prior assessments are explicitly called for, such as in the UN resolutions 61/105 and 64/72 for high seas bottom fisheries, implementation remains patchy, with no bottom fisheries assessments yet conducted in the North Atlantic. Many other human activities that have the potential for adverse effects have not undergone prior assessment. Current gaps in regulation or implementation include, among others, geoengineering schemes⁷, offshore energy projects, floating marine aquaculture facilities, Sargassum harvest, bio-prospecting, and most fisheries.

A UN Working Group on issues related to the management of biodiversity beyond national jurisdiction has recognized the importance of further developing scientific and technical guidance on the implementation of environmental impact assessments with respect to planned activities in areas beyond national jurisdiction, including consideration of the assessment of cumulative impacts.⁸ The Convention on Biological Diversity's 10th meeting of the Conference of the Parties (CBD COP10) requested the CBD Secretariat to facilitate the development of such guidance, building on the results of a 2009 Expert Workshop on the topic.⁹ This is to be submitted for further consideration to a meeting of the Subsidiary Body

⁴ Fishing, wind farms and other renewable energy projects, offshore aquaculture, oil and gas extraction, and mineral and sediment extraction are all listed under the EIA and SEA Directives and require prior impact assessments. These activities also require an Environmental Impact Statement (EIS) in the US.

⁵ In the EU, activities listed under ANNEX I of the EIA Directive require prior assessment regardless of location as well as all plans and programmes that set the framework for future development of projects listed under Annex I or II of the EIA Directive or require an assessment under the Habitats or Birds Directives. In the US an EIS is required for major federally permitted activities anywhere within US jurisdiction.

⁶ The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (in force as from 11 December 2001).

⁷ An example is carbon capture and storage. Although the London Convention recently adopted an assessment framework for research related to ocean fertilization (after prohibiting commercial activities), other geoengineering schemes will likely be proposed as climate mitigation opportunities raise more and more interest.

⁸ Recommendations of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction, paragraph 16 (UNGA A/65/68).

⁹ 2009 Expert Workshop on Scientific and Technical Aspects Relevant to Environmental Impact Assessment in Marine Areas beyond National Jurisdiction (<http://www.cbd.int/doc/meetings/mar/eweiama-01/official/eweiama-01-02-en.doc>) and paragraph 50 of COP10 decision X/29 on coastal and marine biodiversity.

on Scientific, Technical and Technological Advice (SBSTTA), prior to the eleventh CBD conference of parties and could provide a helpful tool in assessing currently unregulated activities.

In trying to address the gaps in implementation of prior impact assessment, it may be helpful to consider the different legal provisions and the bodies of competence for their implementation in the form of a matrix. This could be used to help establish goals and milestones as well as to identify opportunities for progress.

Activity	Legal provisions	Responsibility for implementation
Fisheries	A/RES/61/105 and 64/72	RFMOs (NAFO, NEAFC, ICCAT)
Seabed Mining	UNCLOS ISA Regulations	Contractors Sponsoring States ISA
Shipping	UNCLOS IMO Regulations	States IMO
Other activities - Offshore energy - Bioprospecting	UNCLOS, articles 206 and 142 Customary international law (see ITLOS Advisory Opinion) CBD Guidelines (in development)	States

It would also be important to broaden the debate on prior impact assessment beyond the immediate realm of the North Atlantic and to look at implementation by other States, for example, in the South and Central Atlantic.

The term 'prior assessment' needs to be addressed here. In the case of the EIS requirement under NEPA in the US, for example, the requirement only applies to "major federal actions", generally defined as major actions that must be permitted under federal law, not for all human activities. In addition, the intent of the law is simply to evaluate the potential effects of a government action and to ensure public input and government response to such input, and is silent about the desirability or permissibility of the action itself. Such policy and management judgments about desirability and permissibility are made by the responsible agency subsequent to the EIS process.

A larger issue that attaches to the 'prior assessment' question is the issue of 'burden of proof' in permitting activities in the ocean generally. In the past, the burden of proof has been on the responsible agency to show that there is in fact harm from the permitted action before the permit may be denied (and even this, of course, only applies to permitted activities under specific legislation). Recently, however, there has been some shifting towards the burden of proof being on the proposer of the action to show that the level of impact will be acceptable prior to the permit being issued. In this situation, no new human activities should be allowed

in ABNJ until the proposer demonstrates that the activity can be conducted in a manner that does not significantly harm the environment.

Recommendations

3.1 Strengthen prior impact assessments through work with the UN and Regional Management Fisheries Organisations (RFMOs)

a) Work within the UN to secure agreement to ensure that any activity, which may have a significant adverse impact on the marine environment or biodiversity in ABNJ is subject to prior assessment by the relevant authorities of the State whose nationals propose to conduct the activity, and

b) Work within the UN, North West Atlantic Fisheries Organization (NAFO) and North East Atlantic Fisheries Commission (NEAFC) to fully implement the requirements for prior assessment in UN resolutions 61/105 and 64/72 for all high seas bottom fisheries in the North Atlantic.

Audience for recommendations

US Department of State (US DOS); US Department of the Interior (US DOI); US Department of Transportation (US DOT); Department of Commerce (DOC) (National Oceanic and Atmospheric Organization, NOAA); and EU Directorate-General External Relations (DG Relex); DG for Maritime Affairs and Fisheries (DG Mare); Council Working Group on the Law of the Sea (COMAR) and current EU member states Presidency

Process and timeline for recommendations

a) Upcoming meetings where the US and the EU can work together to advance this recommendation include the UN Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (BBNJ; 30 May – 4 June 2011), Rio+20, the International Union for the Conservation of Nature (IUCN) World Conservation Congress (6 to 15 September 2012 in Jeju, Republic of Korea.)

b) Negotiations of the 2011 UN Resolution on sustainable fisheries, including a review of Regional Fisheries Management Organization (RFMO) compliance with regard to carrying out required environmental assessments for bottom fisheries (tentatively 13-16 September and 8-16 November, 2011, NYC.)

4 Identifying Ecologically and Biologically Significant Areas (EBSAs) and Vulnerable Marine Ecosystems (VMEs)

Under CBD, Ecologically and Biologically Significant Areas (EBSAs) are those that meet one or more of seven scientific criteria: 1) uniqueness or rarity; 2) special importance for life-history stages of species; 3) importance for threatened, endangered or declining species and/or habitats; 4) vulnerability, fragility, sensitivity, or slow recovery; 5) biological productivity; 6) biological diversity; and 7) naturalness.

Further, based on growing concern about the adverse ecosystem impacts of fishing on the high seas, the 2006 United Nations General Assembly Resolution 61/105 called “upon States to take action immediately, individually and through regional fisheries management organizations and arrangements, and consistent with the precautionary approach and ecosystem approaches, to sustainably manage fish stocks and protect vulnerable marine ecosystems (VMEs), including seamounts, hydrothermal vents and cold water corals, from destructive fishing practices, recognizing the immense importance and value of deep-sea ecosystems and the biodiversity they contain.”

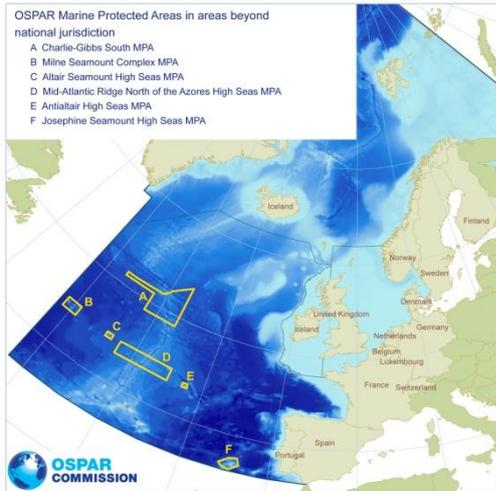
Identifying EBSAs and VMEs is an important first step in ecosystem based management and may, in some cases, nest into a larger process of integrated management tools, including marine spatial planning (MSP) on the high seas for a variety of purposes including, but not limited to, conservation.

Efforts to identify EBSAs and VMEs, per domestic criteria and legislation, have been conducted within the EEZs of both the US and the EU, serving as the basis for establishing marine protected areas (MPAs) and other protective measures. Unlike in domestic waters, the relevant authorities in ABNJ are few, better allowing for an integrated approach, rather than the piecemeal sectoral approach often taken. However, ecological data needed to identify such areas are meager across much of the ABNJ in the North Atlantic.

Some progress has been made recently with respect to bottom fishing¹⁰, and important steps were taken last year by the OSPAR Commission which was set up in 1992 for the Protection of the Marine Environment of the North-East Atlantic (see box 1).

As yet, however, there is no North Atlantic-wide, systematic and coordinated process for identifying and adopting cross-sectoral management measures for EBSAs and VMEs. Such a process could ensure they are evaluated and designated based on representation of basin scale patterns of diversity, connectivity and biogeographic affinities.

¹⁰ UN resolutions 61/105 and 64/72 require States to identify areas where vulnerable marine ecosystems” (VMEs) are known or likely to occur and manage bottom fishing to prevent significant adverse effects on VMEs, or not authorize them to proceed. While some progress has been made toward implementing these resolutions by NAFO and NEAFC in the North Atlantic, much remains to be done.



Box 1: The World's first network of MPAs in ABNJ

In a pioneering step, in September 2010, Ministers and high level representatives of the OSPAR Commission (representing Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom, and the European Commission on behalf of the European Union) protected a network of six unique and ecologically sensitive sites in the Wider Atlantic (OSPAR Region V) as MPAs in ABNJ. They cover a total area of 285 000 km², an area larger than the United Kingdom, and include sections of the Mid-Atlantic Ridge and a series of seamounts hosting a range of vulnerable deep-sea habitats and species. Four of the MPAs have been established in collaboration with Portugal as parts of these areas are subject to a submission by Portugal to the Commission on the Limits of the Continental Shelf. Together these areas constitute the world's first network of MPAs in ABNJ.

For more information go to:

http://www.ospar.org/html_documents/ospar/html/ospar_2010_summary_record.zip

Recommendations

4.1 Identify EBSAs and VMEs through regional collaboration, including joint workshops for the North Atlantic

The EU and US should work together to accelerate progress in identifying possible Ecologically or Biologically Significant Areas (EBSAs) and Vulnerable Marine Ecosystems (VMEs) using the criteria established by the Convention on Biological Diversity (CBD) and UN Food and Agricultural Organization (FAO) through regional collaboration, including joint workshops for the North Atlantic.

The UN Food and Agriculture Organization (FAO) and the Convention on Biological Diversity (CBD) have in parallel agreed to similar criteria to protect VMEs and EBSAs, respectively. In the fall of 2011, the UN General Assembly (UNGA) will review compliance with regard to the protection of VMEs; and the CBD Eleventh Conference of Parties (2012) will review progress in the identification of EBSAs.

In October 2010, the CBD COP 10 agreed to "...establish a repository for scientific and technical information and experience related to the application of the scientific criteria on the identification of ecologically or biologically significant areas (EBSAs) in annex I of decision IX/20 [...] to develop an information-sharing mechanism with similar initiatives, such as FAO's work on vulnerable marine ecosystems (VMEs) [...]" (X/29, paragraph 39).

The need for cooperation is widely recognized. Upon recommending that regional workshops be established, the CBD COP 10 emphasized cross-agency and multi-State cooperation.¹¹

¹¹ Requests the Executive Secretary to work with Parties and other Governments as well as competent organizations and regional initiatives, such as the Food and Agriculture Organization of the United Nations (FAO), regional seas conventions and action plans, and, where appropriate, regional fisheries management organizations, with regards to fisheries management, to organize [...] a series of regional workshops [...] with a primary objective to facilitate the description of ecologically or biologically significant marine areas [...] as well as other relevant compatible and complementary nationally and intergovernmentally agreed scientific criteria, as well as the scientific guidance on the identification of marine areas beyond national jurisdiction, which meet the scientific criteria in annex I to decision IX/20; (X/29, paragraph 36).

To reduce costs and redundancies, as well as to encourage greater coordination of protection, we recommend that the gathering of scientific information required for the identification of VMEs and EBSAs be considered together, whenever practical, and that regional workshops be convened for the North Atlantic or a sub-area thereof. Collaborative and targeted investments in data collection efforts and data archives could facilitate timely assessments and management actions to conserve sensitive and vulnerable areas.

Audience for recommendation

CBD Secretariat and Parties (EU, OSPAR); US; Food and Agriculture Organisation (FAO); North East Atlantic Fisheries Commission (NEAFC); North West Atlantic Fisheries Organization (NAFO); OSPAR; International Seabed Authority (ISA); International Maritime Organization (IMO) (with regard to Special Areas, SAs, and Particularly Sensitive Sea Areas, PSSAs); the Global Ocean Biodiversity Initiative (GOBI) (with regards to scientific capacity to describe EBSAs); Global Environment Facility (GEF) (with regards to funding for capacity building); Intergovernmental Oceanographic Commission (IOC) (with regard to Global Open Oceans and Deep Seabed, GOODS).

Process and timeline for recommendation

OSPAR, NAFO, and NEAFC annual meeting cycle; ISA annual meeting (spring 2011); United Nations General Assembly (UNGA) review of Regional Fisheries Management Organisation (RFMO) compliance (fall 2011) Rio+20 (2012); Convention on Biological Diversity, 11th meeting of the Conference of the Parties (CBD COP 11, India, 2012); a North Atlantic regional workshop.

5 Managing and protecting EBSAs and VMEs, including through the establishment of high seas marine protected areas (MPAs)

5.1 Promote protection of OSPAR MPAs

The EU and the US should promote cooperation internally within competent authorities regarding the conservation and management of the OSPAR marine protected areas in areas beyond national jurisdiction.

The OSPAR Commission has established six MPAs in ABNJ (see box 1). With respect to the mandates provided to OSPAR through the Convention and the roles and responsibilities of other competent authorities, such as the North-East Atlantic Fisheries Commission (NEAFC), the International Seabed Authority (ISA) and the International Maritime Organization (IMO), OSPAR has stated from the outset that adequate consultation with relevant competent authorities must occur prior to the establishment and during management of MPAs in the ABNJ of the North-East Atlantic.

Since multiple international organizations and conventions are responsible for management of human activities in ABNJ, collaborative arrangements and joint management principles amongst agencies (and their member States) with competence to regulate specific activities in the OSPAR MPAs are needed to move from a sectoral to an integrated ecosystem-based management approach. A first informal meeting in 2010 in Funchal, Madeira brought together representatives of various international authorities with competences in managing

the marine environment of the North-East Atlantic and other stakeholders to discuss joint management approaches.

To support the development of regional management approaches and joint management principles for the six OSPAR MPAs in the North-East Atlantic and other initiatives to be developed on the North-West Atlantic, EU Member States and the US could promote cooperation internally within their domestic agencies and externally at the various international fora and competent authorities where management measures will be discussed.

Audience for recommendation

OSPAR; NEAFC; NAFO; ISA; IMO; US DOS; DOC (NOAA) and DG Relex; DG Mare; EU Member States; OSPAR Contracting Parties and the US within these organizations.

Process and timeline for the recommendation

Should start in 2011; in line with meeting schedules and Programs of Work of relevant organizations.

5.2 Gain practical experience in establishing high seas MPAs through regional area-based management initiatives such as the Sargasso Sea Alliance

a) Promote cooperation between the EU and the US and within competent authorities regarding the conservation and management of EBSAs beyond national jurisdiction in the North Atlantic.

b) Seek opportunities to gain practical experience in establishing High Seas Marine Protected Areas (MPAs) in the North Atlantic through regional area-based management initiatives such as the Sargasso Sea Alliance seeking to enhance conservation of the Sargasso Sea.

Work is already underway through the OSPAR convention (Recommendation 3), other Regional Seas Organizations, NAFO and NEAFC, to identify and in some cases protect areas beyond national jurisdiction in the North Atlantic. The results of the regional workshops and RFMO activities can also identify the presence of EBSAs and VMEs that would benefit from more comprehensive management.

A new initiative is also underway that is seeking to enhance cooperation for the conservation of the Sargasso Sea ecosystem that is being spearheaded by the government of Bermuda in cooperation of the government of the United Kingdom. The Alliance aims to build international support for work within the constraints of the existing international law of the Sea and the competences of relevant international and sectoral bodies such as IMO, ISA, ICATT, NAFO and UNESCO (perhaps through the World Heritage Convention – although that poses major jurisdictional issues) to put in place protection measures for all or parts of the Sargasso Sea, and to use the experience to demonstrate what can and cannot be done within the existing legal framework.

Such site specific area-based management efforts can improve practical understanding and experience about how existing sectoral measures, can be used to secure the long-term protection and management of important areas, and accordingly, what opportunities exist for facilitating comprehensive measures in ABNJ.

We therefore recommend that the EU and the US cooperate in seeking to understand the level of activities and potential threats to the Sargasso Sea and other ecologically significant areas in the North Atlantic, and to seek to secure any necessary conservation and management measures through existing sectoral mechanisms, such as those available through the International Maritime Organization (IMO), the International Seabed Authority (ISA), Regional Seas Conventions, Regional Fisheries Management Organizations (RMFOs), International Commission for the Conservation of Atlantic Tunas (ICCAT) and Northwest Atlantic Fishers Organization (NAFO). Broad-based support from the EU and US will be critical throughout such processes.

Audience for recommendation

EU Commission and Member States; US Government; OSPAR; FAO; NEAFC; NAFO; ISA; IMO (with regard to SAs and PSSAs); The International Commission for the Conservation of Atlantic Tunas (ICCAT); GOBI; Sargasso Sea Alliance

Process and Timeline for recommendation

Should start in 2011; in line with meeting schedules and Programmes of Work of relevant organisations

5.3 Improve implementation of UN Resolutions 61/105 and 64/72 on bottom fisheries

Improve implementation of UN Resolutions 61/105 and 64/72, which require States to manage bottom fishing to prevent significant adverse impacts on Vulnerable Marine Ecosystems (VMEs), or not authorize such fisheries to proceed.

Bottom trawl and longline gear can have severe and long-lasting effects on important benthic habitats, including deep sea corals, sponges, and other VMEs. Two UN Resolutions, (61/105 (2006) and 64/72 (2009)), call on States whose vessels conduct bottom fisheries on the high seas to identify VMEs in areas subject to fishing and determine whether bottom fishing activities would cause significant adverse impacts to such ecosystems and threaten the long-term sustainability of deep sea fish stocks. The Resolutions additionally call on States to adopt measures to prevent significant adverse impacts on VMEs, or not authorize bottom fisheries to proceed.

The implementation of UN Resolutions 61/105 and 64/72 in the North Atlantic and elsewhere has been assessed by scientists and found to be uneven and seriously flawed in a number of important respects.¹²

Because damage to deep ocean habitats caused by high seas bottom fishing can have impacts on fisheries and other resources of importance to the US and the EU, more vigorous

¹² see, e.g.:Rice, Jake, 2010. Review of Progress on Implementation of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas – Experience of RFMO/As with identifying and protecting VMEs. Discussion Paper 2 prepared for the FAO Workshop on the Implementation of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas – Challenges and Ways Forward, Busan, Korea, 10-12 May, 2010. Report of the ICES/NAFO Joint Working Group on Deep-water Ecology (WGDEC) 22–26 March 2010 Copenhagen, Denmark.

and full implementation of the two UN resolutions in the North Atlantic and beyond would accrue benefits to both.

Audience for the recommendation

NEAFC; NAFO; US DOS; DOC (NOAA); DG Relex; DG Mare; United Nations

Process and timeline

should start in 2011 in line with meeting schedules and programs of work at NAFO and NEAFC and at the United Nations negotiations of the 2011 UN Sustainable Fisheries Resolution, including a review of Regional Fisheries Management Organization (RFMO) compliance with regard to carrying out required environmental assessments for bottom fisheries (tentatively 13-16 September and 8-16 November, 2011, NYC).

6 High Seas Governance

Currently, governance of the high seas is based primarily on the UN Convention on the Law of the Sea (UNCLOS) provisions. UNCLOS is informed by a number of entities and processes having a mandate with regard to marine-related issues such as IMO (transportation), FAO (fisheries), CBD (biodiversity) and IOC (marine science).

Implementation is currently fragmented among these sectoral bodies as well as regional ones, such as the Regional Fisheries Management Organizations (RFMOs) and the Regional Seas Conventions among others, with limited arrangements only to coordinate their activities to ensure coherence of measures. Additionally, some activities 'slip through the cracks' if they do not fall squarely under the jurisdiction of one of the sectoral entities. The most critical point is that no real framework exists for cooperation between organizations with different mandates in order to ensure coherence of measures.

There are, however, significant differences between governance issues in the high seas and areas inside national jurisdiction, which range from the types of stakeholders involved to the spatial and temporal scales of the phenomena observed, and the nature of the policy and management bodies. Moreover, whereas maritime transport and associated pollution and dumping, fisheries, and mineral extraction activities are currently regulated through specific agreements under the UNCLOS, the explicit protection of marine biodiversity has no legally binding instrument in place, and there is no provision for emerging uses and activities. Implementation of conservation measures outside those agreed upon within regional organizations, or other multi-lateral arrangements, is challenging and no overall regulatory framework exists to integrate monitoring, control, and surveillance of such measures.

Scientific knowledge of open ocean and deep sea habitats is increasingly showing the fragility, vulnerability and degradation of many of these ecosystems. This underscores the urgent need to enhance cooperation for the conservation and sustainable use of the marine ecosystems and biodiversity in ABNJ.

Most of the modern principles of ocean governance¹³ are already included in the main political instruments on both sides of the Atlantic as well as in the wider frameworks such as the Rio Declaration, Agenda 21 and its Joint Plan of Implementation agreed at WSSD, CBD, UNFSA, the London Convention and Protocol, etc. To improve the consistency of their application across the multiple sectors, these principles could be elaborated in a form of a UNGA declaration, or an implementing agreement under UNCLOS. At the same time, both the EU and US could promote discussion both jointly and with others on how to improve the current sectoral arrangements into broader, comprehensive cooperation.

Recommendations

6.1 Promote Integrated Management Tools, including Marine Spatial Planning (MSP) on the high seas

MSP is proving to be a key tool for ocean management within the EEZs, with several countries developing the needed instruments for integrated ocean management. The potential for high seas governance should also be developed, taking in consideration the legal, ecological and socioeconomic differences between beyond and within national jurisdictions.

The tools needed to implement a MSP process in the high seas should include an information system computing appropriate environmental and socioeconomic indicators, such as differences in biodiversity, location of VME's and EBSAs, intensity maps of spatial and temporal variation of the different human activities and, finally, measures of the state of the environment. Particularly important will be the implementation of surveillance and monitoring devices that could detect abusive behavior in real-time. MSP should also be based on agreed policy principles and objectives shared by all States, agencies and stakeholders.

In implementing MSP on the high seas, the complex biogeographic features of these ecosystems need to be considered. The Large Marine Ecosystems and Bioregions can be used as natural units for this process.

This could be achieved via the following two steps:

- 1. Support efforts, to establish a comprehensive planning process for MSP on the high seas in the North Atlantic, using OSPAR and developing a similar process for the NW Atlantic.**
- 2. Support efforts at the UN in this direction to support a global process of establishing MSP on the high seas.**

¹³ These principles include: respect for the law of the sea as set out in UNCLOS and related instruments, protection and preservation of the marine environment, international cooperation, science-based approach to management, precautionary approach, ecosystem approach, integrated approach, sustainable and equitable use, public availability of information, transparent and open decision-making processes, and responsibility of States as stewards of the global marine environment. Intervention on behalf of the European Union and its 27 Member States by Mr. Jorge Urbiolua, 2 February 2010, under agenda item 5(d) of the Ad-hoc Open-ended Working Group to study issues relating to the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction.

Audience for recommendation

US DOS; DOC (NOAA); US Environmental Protection Agency (EPA); OSPAR; DG Mare

Process and timeline for the recommendation

Should start in 2011. Upcoming meetings where the US and the EU can work together to advance this recommendation include the UN Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (BBNJ; 30 May – 4 June 2011), Rio+20, the International Union for the Conservation of Nature (IUCN) World Conservation Congress (6 to 15 September 2012 in Jeju, Republic of Korea.)

6.2 Extend and improve international shipping requirements to include all classes of vessels, in particular fishing vessels

a) Extend the applicability of relevant international requirements/standards on ship safety, labor, and environmental protection to all classes of vessels authorized to operate on the high seas, in particular fishing vessels;

b) Improve flag state responsibility on the high seas with respect to obligations under the United Nations Convention on the Law of the Sea (UNCLOS) and other relevant international agreements, including flag State obligations with respect to the conservation and management of fisheries.

Both the EU Lisbon Strategy and Integrated Maritime Policy and the US National Ocean Policy aim for sustainable economic growth while providing for safe, secure, and productive access to, and uses of, the ocean.

The current practice under which fishing vessels are exempt from many key IMO, ILO and other regulatory requirements decreases safety and quality standards, may pose risks to the crews of high seas fishing vessels, and arguably makes it more difficult to track such vessels for the purposes of monitoring compliance with multilaterally agreed fisheries conservation and management measures.

Therefore, we recommend that regulatory requirements for fishing vessels operating in ABNJ should be expanded to include existing rules and regulations that apply to merchant shipping and transport vessels. These would include safety of life at sea regulations, Automatic Identification Systems (AIS), labour standards, pollution standards, IMO numbers for fishing vessels authorized to operate on the high seas; and vessel accountability and ownership transparency. Regulatory requirements for fishing vessels operating in remote areas outside of territorial waters should be harmonized into a system of international shipping standards as provided for through the IMO.

To further combat Illegal, Unreported, and Unregulated (IUU) Fishing, we urge ratification and implementation of the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing (FAO 2009).

The current system of vessel flagging whereby flag states which either cannot or do not exercise effective control over the activities of vessels flying their flag operating beyond national jurisdiction are allowed to continue flagging vessels also distorts the marketplace and places an unfair onus on those flag states and vessel operators who do follow the rule of law. Therefore, we recommend measures be adopted to deal with vessels flying flags of

'non-compliance', and that these vessels be subject to enhanced port inspection schemes, as is the case with ships registered to flag States listed on the Paris Memorandum of Understanding 'blacklist' and US Coast Guard (USCG) 'Target List', and other non-flag state measures.

Audience for recommendation

United States Coast Guard (USCG); Social Affairs and Inclusion; DG Mare; DG Environment, DG Mobility and Transport, DG Employment, Paris Memorandum of Understanding on Port State Control (Paris MoU), IMO

Process and timeline for the recommendation

Should start in 2011; in line with meeting schedules and programs of work of relevant organizations.

6.3 Establish an EU/US collaborative science and policy initiative for the North Atlantic

Establish an EU/US collaborative science and policy initiative to discuss areas of potential cooperation on a regular basis, including a joint declaration of principles, bringing together the relevant authorities with a view towards integrated oceans management for the North Atlantic basin.

Europe and North America are two of the main players in the high seas. Their nationals, vessels and corporations are involved in a variety of high seas activities and therefore a strong commitment by governments on both sides of the Atlantic is needed to achieve integrated management. There is a real opportunity to enhance the relationship between EU/US at the scientific, political and economic levels and to share and protect common resources. At the international arena, the North Atlantic maybe regarded as a test case for a number of initiatives that could be applied more broadly.

Audience for recommendation

EU Commission; EU High Representative of the Union for Foreign Affairs and Security Policy; DG Mare; DG Environment; US DOS; DOC (NOAA); the US National Ocean Council; United Nations; US and EU representatives; Regional Seas Conventions and RFMOs

Process and timeline for the recommendation

Some relevant initiatives could set the stage for this cooperation such as the Sargasso Sea Initiative, the OSPAR process, the UNGA processes, implementation of the CBD Nagoya COP10 conclusions and recommendations, the ICCAT and conservation of tuna and European and American eels.

6.4 Focus on joint approaches to improve surveillance and monitoring of the high seas¹⁴

a) Consider joint EU-US agreements to enhance maritime domain awareness (MDA)¹⁵ for the North Atlantic that cover all maritime activities, including fisheries;

b) Implement innovative and effective surveillance and monitoring schemes in the high seas, especially within marine protected areas (MPAs), for maritime activities, including fisheries.

Transatlantic cooperation in tracking surface vessel traffic activities would lead to efficiencies on both sides of the Atlantic, as well as better maritime domain awareness (MDA), and hence improved national and international security.

It is increasingly recognized that resource and food security are elements of national and international maritime security. Hence, the current practice under which fishing vessels are exempt from many key regulatory requirements inhibits the effective surveillance and enforcement of remote fisheries, and may pose a risk to national and international maritime security. These exemptions include safety and pollution conventions and measures, automatic reporting and safety at sea requirements, as well as registry listings.

Current and emerging technologies now make surveillance of remote maritime areas possible, including MPAs.¹⁶ Many such systems are already in operation or in planning stages, often for maritime security purposes. States continue to invest in development of new surveillance technologies, improvement of existing technologies, and creation of effective “data fusion” systems to integrate data from the wide array of surveillance data sources and make them usable to enforcement personnel.

Therefore, we recommend that surveillance requirements for all maritime activities, including those that occur in marine protected areas should be integrated in national (and where appropriate, international) marine security, intelligence and surveillance systems. Integration will require cross-agency cooperation (including military, when appropriate) within national jurisdictions; trans-national cooperation across borders; and international cooperation through multi-lateral arrangements for areas beyond national jurisdiction. Cooperative integrated measures will allow for sharing of costs, reduced redundancy and increased efficiency.

Audience for recommendation

US DOS; Department of Homeland Security (DOS); US DOD (e.g. Executive Agent for Maritime Domain Awareness, or Oceanographers of the Navy); other security agencies; DOC (NOAA); DG Relex; The European Maritime Safety Agency (EMSA); Maritime Security Committee (MARSEC); DG Mare; DG Environment; North Atlantic Treaty Organization

¹⁴ See also Expert Paper of the CALAMAR working group on Transatlantic Cooperation, chapter 5 Monitoring, control and surveillance

¹⁵ The term Maritime Domain Awareness refers to the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or environment of a nation. Conservation enforcement should be seen in the broader context of other Monitoring Control and Surveillance (MCS) related funding and activities.

¹⁶ See, eg. Brooke SD, Lim TY, and Ardron JA. (2010) Surveillance and enforcement of remote maritime areas. Paper 1: surveillance technical options. Marine Conservation Biology Institute, USA. 37 Pages. http://www.mcbi.org/what/what_pdfs/SERMA.pdf

(NATO); IMO; FAO; NEAFC; NAFO; Regional Maritime Pollution Response Organisations (e.g. Bonn Agreement)

Process and timeline

NEAFC-OSPAR joint meeting to discuss management, monitoring, control and surveillance of the OSPAR high seas MPAS (date to be announced, 2011); UNGA review of RFMO compliance with 61/105 & 64/72 (NYC, Sept/Nov 2011); UN Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (UN BBNJ) (NYC, 31 May – 3 June 2011), national and international security meetings like Coastal Surveillance 2011: 28 – 30 November in Singapore, the DOD's 9th Annual Maritime Reconnaissance and Surveillance Conference 21-22 September 2011, or the DOD's Maritime Domain Awareness Conference 20-21 June 2011, the Maritime Security Conference 2-5 May 2011 in Kiel, Germany.

7 Conclusion

In order to ensure conservation and sustainable use of resources in the North Atlantic as a whole, proper management of human activities in ABNJ is of paramount importance. Current management and governance systems of ABNJ lag far behind those for areas within national jurisdiction. Therefore, the high seas of the North Atlantic Ocean offer particular opportunities for cooperation between the EU and the US for the conservation and sustainable use of these marine ecosystems. Possible areas of transatlantic cooperation in the near-term range from: the establishment of procedures for prior impact assessments of human activities and their full implementation; the identification and management of EBSAs and VMEs; to a number of high seas governance issues such as the promotion of MSP on the high seas or agreements to enhance maritime domain awareness. While the implementation of these recommendations would be facilitated by US ratification of UNCLOS and the CBD, it is not necessary or desirable to wait for ratification of these instruments to move forward

Most recommendations discussed above target EU/US government institutions directly, such as DOS, DOC/NOAA or DG Relex and DG Mare, which are, for instance, to be addressed at upcoming international meetings such as UN working groups, the IUCN World Conservation Congress, Rio+20, or international security meetings. Further target audiences for these recommendations include regional bodies such as OSPAR and international organizations including the FAO, IMO and the UNGA processes.

Positive examples like OSPAR's recently declared network of six MPAs in ABNJ, and the regional area-based management initiative, the Sargasso Sea Alliance, for the conservation of the Sargasso Sea, are highlighted as important initiatives to build upon in the near future.

A major challenge for the implementation of these recommendations is the lack of resources (e.g., finances, time and attention) currently allocated to these issues. The implementation of effective, integrated, science-based management, monitoring and enforcement of activities that take place on the high seas, as well as any further research, co-operation and innovation in the field of offshore and deep-sea exploration, will require appropriate funding. It will also be challenging to move from broad recommendations to actionable goals and milestones to which the US and EU agree. If the political will is there, however, then the other challenges (money, time, attention) will be easier to solve.

Obvious areas of overlap exist between this working group and the one focusing on Integrated Tools, particularly with respect to the area of MSP on the high seas. While the high seas working group merely suggests MSP as a possible management approach for ABNJ, details about the implementation of such an approach are discussed in the Integrated Tools group focusing on EEZs. Another cross-over issue is the improvement of monitoring, control and surveillance, which was also discussed by the working group on Transatlantic Cooperation.

Starting to implement the near-term recommendations discussed above could be a first step on the way to developing a sound framework for long-term transatlantic cooperation on ABNJ issues, in order to maintain the substantial economic and ecological values of the open ocean and the deep sea.