Sargasso Sea Commission / Copenhagen University / BIMCO

2nd International Shipping Industry Stakeholder Engagement Consultation

BIMCO Offices, Copenhagen
Tuesday 3rd December 2024
1000-1600 CET

Readout[1]: 2nd International Shipping Industry Consultation: "*Strengthening the Stewardship of a Biologically and Economically Important High Seas Area – The Sargasso Sea*".

Introduction

As part of the ongoing GEF-UNDP-UNESCO-IOC Sargasso Sea Project, a second shipping-industry focused consultation event, co-hosted by CLIMA from the University of Copenhagen, was held at the Copenhagen offices of BIMCO on the 3rd of December 2024. Facilitated by NLA International Ltd (NLAI), the consultation was attended in person or online by representatives from BIMCO's London & Copenhagen Offices, A.P. Moller - Maersk, Wilhelmsen Ship Management, Lloyd's Register Foundation, Oldendorff Carriers, the Sustainable Shipping Initiative, IMarEST, UNEP-WCMC and the UK Chamber of Shipping. There were several short update briefings from the Project Team and the Sargasso Sea Commission Secretariat with Duke University's Marine Geospatial Ecology Lab providing a key briefing on their recent findings.

Although unable to attend on this occasion, the IMO, including from their GloFouling Partnership Project, Intertanko, Intercargo, CLIA, Hapag-Lloyd, MSC, Gard, the International Chamber of Shipping, the World Shipping Council, and the International Cable Protection Committee have all agreed to participate in this Project; as a result the Project will continue to engage with these organisations and others in the International Shipping Industry as it continues to build this key stakeholder group into the future.

Consultation Aim

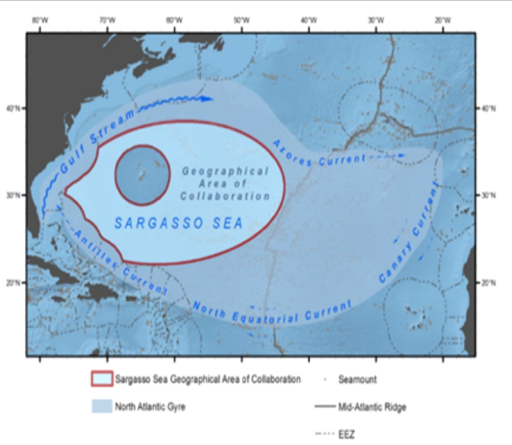


Figure 1: Sargasso Sea Geographical Area of Collaboration (Duke: MGEL)

The aim of this event was to **present the draft Socio-Ecosystem Diagnostic Analysis (SEDA)[2] findings and discuss voluntary measures and areas for collaboration that might mitigate identified impacts and assist in the overall conservation and stewardship of the Sargasso Sea Geographical Area of Collaboration**. By collaborating with this key stakeholder community, the Project aims to increase shared-awareness and stimulate discussion. The voice and perspectives of the International Shipping Community are essential in helping determine potential future voluntary governance and stewardship measures for all users of the Sargasso Sea.

[1] For those new to this Project, the readout from the 1st International Shipping Industry Consultation, which contains full details regarding Project background and overall aims is included at Appendix 2.
[2] Socio-Ecosystem Diagnostic Analysis: builds on Transboundary Diagnostic Analysis (TDA), an established process used in and across EEZ boundaries. The SEDA process seeks to capture both the importance of the Sargasso Sea as an ecosystem, and its importance from a social and economic perspective.

Event Agenda[3]

After a short introductory briefing about the Sargasso Sea Commission for those new to the Project and a brief explanation of the Project Stakeholder Engagement process, an update on Project progress since the 1st Consultation was delivered by the Project Chief Technical Adviser (CTA). This was followed by the presentation of a recent paper from Duke University Marine Geospatial Ecology Lab (MGEL) – produced as part of the Project SEDA evidence – on *Vessel Traffic in the Sargasso Sea Geographical Area of Collaboration, 2019-2021.* Following an opportunity for attendees to question the lead author, shipping industry attendees were then invited to introduce and explain mitigation measures already in place, or under consideration.

The afternoon session began with CLIMA presenting on the Blue/Green Corridor approach to sea management, which together with the Duke paper, set the scene perfectly for 2 full-group roundtables. The first focused on identifying what the characteristics of good voluntary mitigation measures may be, and the second examined potential measures that might address the vulnerabilities of the Sargasso Sea GAC which could subsequently be considered for incorporation into the Strategic Action Programme (SAP)[4]. Finally, next steps were set-out by the Project CTA with the event précised by NLAI and wrapped-up by the co-hosts.

Event Context & Timing

This engagement comes at a critical juncture. With the future Biodiversity Beyond National Jurisdiction (BBNJ) Agreement's[5] adoption on the global stage, **there is a growing need to identify practical pathways for implementing Area-Based Management Tools (ABMT) and cooperative measures in regions where traditional national governance frameworks do not apply.** The Sargasso Sea – an entirely high-seas ocean ecosystem with unique biodiversity, which has benefitted from long-term ecosystem monitoring and data collection – is, through this Project, emerging as a pilot region for the application of such measures. **The Project's recent work**, which includes spatial mapping of vessel traffic, analyses of marine mammal migration corridors, and the identification of potential vulnerability hotspots, **provides the knowledge base required to consider voluntary industry-led measures**. These measures, if well-designed and adopted broadly, might serve as a foundation for shaping future BBNJ implementation and more robust, globally applicable approaches.

Reflecting on the Evolving Knowledge Base

The meeting presented an array of preliminary insights drawn from the SEDA. At the highest level, stakeholders acknowledged that the **Sargasso Sea hosts** not only **iconic local species** such as sea turtles and eels, but also **significant marine mammal migrations that intersect with busy shipping routes**.

Updated vessel traffic data, collected and analysed by Duke University's MGEL – from which a small selection of figures are on the following page – **offered a finer understanding of where and when ships are likely to overlap with key ecological features**. **This evidence**, which includes year-round spatial patterns and seasonal fluctuations in vessel speeds and densities, **holds potential for designing targeted voluntary measures**. In particular, **these data begin to build a picture** of speed of distribution of transiting vessels, their types and characteristics, and associated flag states.

[3] The full event Concept Note and Agenda is included at Appendix 1.
[4] Strategic Action Programme: based on the evidence and findings from the SEDA a causal chain analysis will be carried out. This will inform socio-economic and ecosystem quality objectives and targets, and the monitoring indicators by which progress can be assessed, enabling better stewardship measures to be put in place for the Sargasso Sea GAC.
[5] Agreement under the United Nations Convention on the Law of the Sea (UNCLOS) on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (ABNJ).

Vessel Traffic Maps

Maps of overall vessel traffic

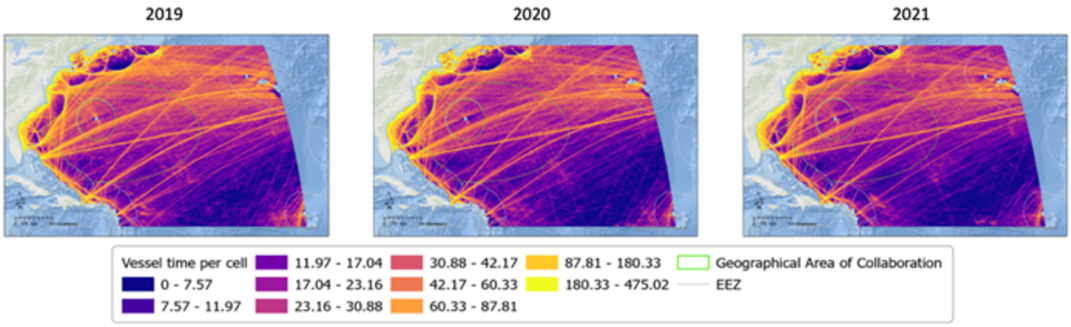


Figure 2: Annual Summaries of all vessel traffic (time in hours) (Duke: MGEL)

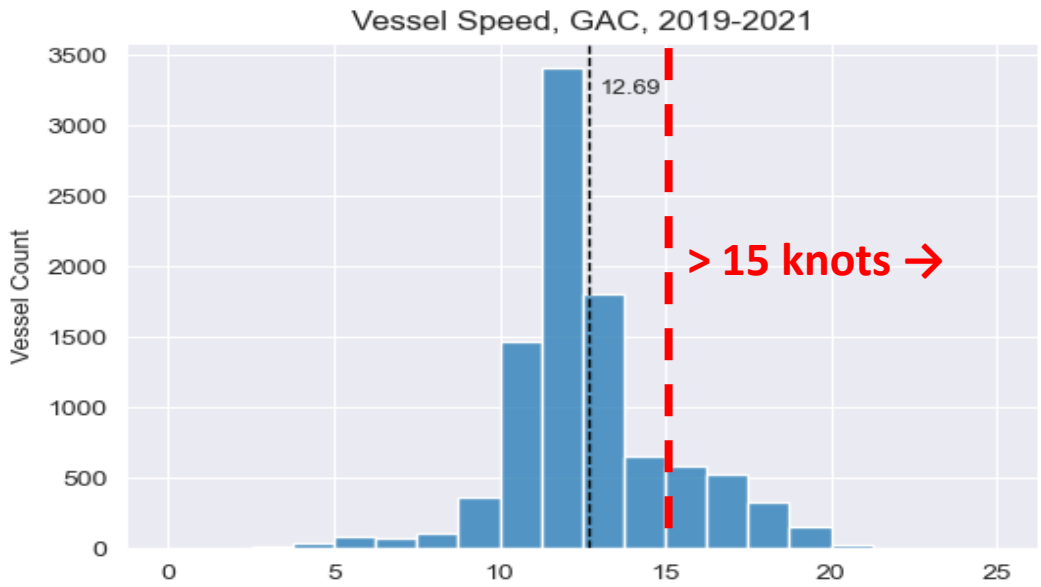


Figure 3: Mean vessel speed in knots (Duke: MGEL)

While **whale strikes emerged as a focal point of the discussion** – given that existing global data has already identified speed thresholds for minimising lethal interactions (see the "above 15 knots" dashed line in Figure 3, a collision speed above which results in an 80% chance of fatality), and that there are other implemented examples of ABMTs for marine mammal protection – **participants also stressed the need to consider a broader suite of potential impacts**. This includes understanding how **operational discharges**, such as **grey water & waste materials**, **air quality**, and **aquatic invasive species** through ballast water and biofouling might influence nutrient levels and ecosystem dynamics, or **how sargassum mats** – iconic floating habitats in this region – **are affected by vessels,** which can cleave them apart.

Discussions highlighted the importance of **connecting ecological vulnerability directly to operational realities**. The group agreed that **future measures**, whether seasonal speed adjustments, routing alterations, or reporting protocols, **must be grounded in granular evidence** that **directly links ecosystem vulnerabilities to shipping stressors**. The value of a precautionary approach was also highlighted. Noting that ABNJs inherently lack a (traditionally national) party responsible for data collection and monitoring, even for a comparatively well monitored area such as the Sargasso Sea, data on many factors is limited. **A balanced, precautionary, approach would allow more data to be gathered and analysed** whilst promoting biodiversity.

This also emphasised the **need for partnership with the shipping industry**, as vessels transiting through the Sargasso Sea are **best placed to collect data as Ships of Opportunity**.

Defining the Characteristics of Effective Voluntary Measures

A central focus of the consultation was establishing a framework **for what constitutes a "good" voluntary measure in the Sargasso Sea context**. Participants broadly agreed on **five core attributes**: they should be **impactful & effective, implementable & realistic, measurable, recognised & communicable,** and **scalable & generalisable**. These principles may seem straightforward, but their practical application can be challenging.

- **Impactful & effective:** Measures **must address a defined and significant risk**. For instance, if the data shows that a large proportion of whales migrating through a particular corridor are exposed to lethal strike risk at speeds above 15 knots, then a voluntary speed reduction during peak migration months could meaningfully lower collision probabilities and reduce fatal impacts. Similarly, if operational discharge data indicates that grey water release coincides with sargassum mat degradation, targeted mitigation steps – such as limiting discharges in known hotspots – could have a tangible environmental benefit.

- **Implementable & realistic:** Even well-designed measures **must fit into commercial and operational realities**. Stakeholders noted that any initiative adding complexity or significant cost – especially during a period when the industry is already navigating decarbonisation goals – may struggle to gain traction or focus. Thus, targeting "low-hanging fruit" is key. This could mean simple actions such as incorporating best-practice advisories into voyage planning software, encouraging observational reporting when conditions allow, or initiating minor route shifts during limited time windows. By starting with small, simple and impactful measures, that may be implemented relatively quickly, an engaged community can be developed which may lead to a more comprehensive "gold standard" over time. Pop-up zones were cited as an example of an unnecessarily complex form of implementation that is impractical from the perspective of the mariner and hard to plan for. Commercial decisions will always impact implementation and impacts on business or liability could present barriers. To maintain momentum, some recommended using established milestones – such as 2040 and 2050 decarbonisation targets – to anchor the evolution of voluntary initiatives.

- **Measurable: Credible data collection and monitoring frameworks are essential**. Without measurability, it becomes difficult to determine whether measures are having the intended effect. Ideally, a measure would come with a clear baseline, a defined target or threshold, and a transparent and straight-forward verification or reporting process. It is important to ensure the reporting process is easily followed (for example, something Automatic Identification System (AIS) based) as this decreases the barrier to participation and potential costs. This may also extend to verification by port states, indicating reporting should be in documentation that can be easily checked.

- **Recognised & communicable:** Measures **need to be understood and valued by a wide audience**. From a corporate standpoint, demonstrating environmental stewardship can strengthen relationships with customers and other stakeholders. Internally, having a simple certification system, recognition programme, or best-practice manual, helps galvanise crew and management support. Externally, clearly communicating the rationale behind measures – such as highlighting evidence that a certain route modification coincides with lowered risk to an endangered species – builds credibility and trust. The group also considered the potential roles of cargo owners, Port States and Flag States in establishing 'best practices' and incentivising compliance through supply chain recognition and direct incentives such as port fee reductions. A precedent for the latter is being set in European ports in relation to marine mammal safety and may provide a transferable approach. Incentivisation mechanisms play a role in recognising and rewarding adoption of voluntary measures, but they are not the only part of the picture.

- **Scalable & generalisable:** Finally, while focusing initially on the Sargasso Sea, stakeholders stressed the importance of **designing measures that are generalisable beyond the Sargasso Sea for long-term coherence**. By creating actions and frameworks adaptable to other high-seas regions, these voluntary measures can contribute to consistent, well-coordinated management strategies. Ensuring coherence across multiple areas beyond national jurisdiction helps to avoid fragmented or highly variable governance, which impede implementation, and strengthens the value of this project as a pilot for BBNJ implementation.

The Fundamental Importance of Data

In addition to these attributes, stakeholders emphasised the importance of **clear, data-driven baselines and technological readiness to support voluntary measures**. Drawing inspiration from existing frameworks – such as those from the International Seabed Authority (ISA), which provide detailed assessments before seabed mining exploitation – participants noted the value of similarly structured guidance for assessing biodiversity impacts in high seas areas. They also highlighted the **urgent need for more open and collaborative data-sharing protocols**, especially concerning operational information that is often confidential. By fostering partnerships that encourage anonymised data provision, the industry could help identify critical vulnerabilities, refine measures that reduce negative impacts (e.g. slowing down during whale migration seasons), and manage potential trade-offs – such as those between reduced speed, fuel efficiency, and emission targets. **Identifying which data types matter most**, including ecosystem indicators or operational performance metrics, would further ensure that measures are both scientifically robust and practically implementable. Notably, **better-integrated data collection on emerging fleets and next-generation vessels could guide early design considerations** for quieter propulsion systems, lower-impact discharges, and more refined ballast water management **at the construction stage**. This is timely, since with an aging fleet new vessels are being designed and commissioned.

Aligning Measures with Broader Industry Agendas

Participants acknowledged that **the shipping industry is currently dealing with multiple, sometimes competing, priorities**. **Decarbonisation, in particular**, has commanded significant attention **driven by IMO** decarbonisation **commitments**. In this context, suggestions emerged on how biodiversity measures might complement, rather than compete with, climate-driven efforts. For example, through the layering of biodiversity measure onto decarbonisation-oriented concepts such as green corridors, thereby creating "blue corridors". It was noted that **decarbonisation is intrinsically part of protecting biodiversity, for example to limit ocean acidification, creating a natural synergy**. This was seen in two ways by the room. It was noted that measures such as green corridors are struggling to move from planning to implementation, and some are facing a "feasibility wall" due to the cost and challenge of their implementation. Combining this with biodiversity measures may heighten importance and broaden support, acting as a catalyst for implementation.

However, a realistic note was struck regarding **the "bandwidth" issue: shipping companies have finite capacity to implement voluntary or mandatory change**. Thus, the introduction of biodiversity measures should be approached carefully, selecting interventions that do not disproportionately increase costs or complexity, and for which there is **human capacity within organisations to address**. It remains unclear whether layering or combining measures is appropriate, and a future discussion around specific proposed voluntary measures may be needed to provide clarity on this point.

Leveraging Incentives, Partnerships, and Data-Sharing

A prominent theme that emerged was the **role of incentives and cross-sectoral partnerships in fostering voluntary measures**. Industry participants emphasised that aligning environmental actions with commercial drivers is more likely to yield widespread support. **Possible incentives** discussed included **reduced port fees** for ships adhering to recommended navigation practices, or certification and ranking of shipping organisations transiting the region. Similarly, cargo owners – particularly those marketing sustainable products – may welcome **supply chain transparency and environmental stewardship as market differentiators**, thereby placing value on carriers that follow recommended protocols in sensitive areas like the Sargasso Sea. **Simple recognition** that a Sargasso Sea user is taking voluntary action to mitigate their environmental and ecosystem impact **is also in itself an incentive** for this positive behaviour to continue and perhaps demonstrating potential best practices for others to adopt.

The notion of **integrating environmental considerations into existing contract clauses**, such as those facilitated by widely recognised maritime organisations, was seen as **a potentially necessary enabler**. The matter of **liability for deviating or reducing speed in response to ecosystem concerns is highly significant**, and a charter party clause would be required to permit this on a voluntary basis. This would not only normalise proactive environmental actions within the routine legal and commercial frameworks that govern global shipping, but it could also help ensure that any operational adjustments do not negatively impact a vessel's contractual obligations. This was being investigated in the context of marine mammal risks, including whether existing standard charter party clauses could be considered to cover such things.

Another essential area for development is **data-sharing and collaborative research**. The high seas are vast and therefore often data-poor, and national authorities typically have limited capacity or jurisdiction to conduct extensive monitoring. **In this void, commercial ships** – many of which regularly traverse these areas – **have a unique opportunity to contribute. These "ships of opportunity"** could voluntarily gather a range of observational data, from oceanographic parameters to sightings of marine megafauna or sargassum distribution patterns. With appropriate technological interfaces and streamlined reporting protocols, this data could feed into scientific databases and inform both short-term measures (e.g. alerting vessels to recent whale sightings) and long-term environmental assessments.

Conclusions & Next Steps

As the consultation drew to a close, **participants expressed optimism that the Sargasso Sea can become a practical example of how voluntary measures might operate effectively in the high-seas context**. The discussion underscored a collective will to move towards concrete discussion of appropriate voluntary measures, **informed by more granular data analysis**. The recurring emphasis on **starting small** – identifying measures that are both operationally feasible and yield measurable environmental benefits – sets a **pragmatic tone** for future consultations. The consensus is that **success will hinge on balancing ambition with realism**, ensuring that initial steps garner trust, engagement, and demonstrable results.

This set-piece hybrid consultation event was the 3rd of the Project so far and the 2nd specifically focused on engaging with key international shipping industry users of the Sargasso Sea in discussions surrounding potential future voluntary or regulatory stewardship measures. Whilst routine electronic engagement between the Project and already recruited key international shipping stakeholders will continue, the next opportunity for a similar set-piece consultation event with this group will take place between the 2-day CLIMA Symposium and the High Seas Symposium in **Singapore on 14th February 2025 – please SAVE-THE-DATE, as your continued engagement and participation is vital for the success of this Project.**

Appendix 1: Concept Note & Agenda for 2nd International Shipping Industry Consultation: "Strengthening the Stewardship of a Biologically and Economically Important High Seas Area – The Sargasso Sea".

By Invitation: Sargasso Sea GEF Project Shipping Industry Consultation 2 – Identified Sargasso Sea impacts and voluntary measures including decarbonisation in and around the Sargasso Sea.

Date: 3rd December 2024 **Time:** 10am-4pm local time (CET)

Location: Copenhagen, Denmark – BIMCO headquarters – Bagsværdvej 161, 2880 Bagsværd

&

online for those who cannot attend in person

Concept:

The Sargasso Sea Commission has been working for over a decade to provide a framework for collaboration focused on conservation of the Sargasso Sea. With funding from two major grants from the Global Environment Facility (GEF) and the French Facility for the Global Environment (FFEM), the Sargasso Sea Commission is producing a socio-ecosystem diagnostic analysis (SEDA) that will lay out the ecological and socio-economic benefits produced by the Sargasso Sea, as well as the threats it faces. This evidence-based document will provide the foundation for a Strategic Action Programme (SAP) for its conservation, agreed by Sargasso Sea stakeholders.

A key industry stakeholder group, making significant use of the Sargasso Sea, is the Shipping Industry. The Sargasso Sea GEF Project has successfully engaged with the Shipping Industry early in the SEDA process, to inform them of the Project goals and to build participation. One aspect of this engagement was to understand what potential voluntary measures both mitigate the risks faced by the Sargasso Sea (captured in the SEDA) might support a longer-term monitoring programme for the area that could realistically be adopted by the industry.

Shipping can have potential impacts on the high seas ecosystems such as: collisions with, and impacts from noise, on cetaceans and other sea life; exotic species introduced via ballast water discharge; the risk of pollution, including oil spills; and the use of fuels that contribute to climate change.

This meeting will present the draft SEDA findings and discuss voluntary measures and areas for collaboration that might mitigate identified impacts and assist in the overall conservation and stewardship of the Sargasso Sea Geographical Area of Collaboration (GAC), including:

- The creation of voluntary blue/green corridors that use more sustainable fuels, reducing CO_2 emissions. These corridors could also include other stewardship considerations, such as avoiding highly sensitive ecosystems;
- Voluntary routing measures, potentially including those that are temporary or seasonal, mitigating impacts when and where they occur;
- Proactive participation in the form of voluntary monitoring, data collection and data sharing, supporting observations of high seas flora and fauna, and maintaining an understanding of the ecosystem's state;
- Certification and recognition systems for voluntary sustainability compliance; and,
- Any new ideas brought forward by participants and stakeholders.

Whilst the focus on this event will be on the Sargasso Sea, this GEF Project is seen by many as a potential 'pilot project' for BBNJ Treaty implementation. As such, its thinking may represent a wider view to ABNJ protection and the implementation of blue/green corridors globally.

This is an invitation-only meeting, designed to foster the cooperation of shipping industry professionals and Project stakeholders, including the:

- Sargasso Sea Commission secretariat and project team.
- Industry representatives including industry bodies and shipping organisations.
- Maritime industry IGOs.
- Academia representing contributors to the Sargasso Sea Project, the SEDA and maritime law & governance.

Agenda

Session 1: 1000-1115

- Welcome & Administration / Individual Introductions *(20 minutes)*
- Overview: Sargasso Sea & GEF Project *(10 minutes)*
- Stakeholder Engagement Process / Summary of Consultation 1 *(10 minutes)*
- Summary & Update of Project SEDA & SAP *(15 minutes)*
- Paper: Vessel Traffic in the Sargasso Sea Geographical Area of Collaboration, 2019-2021 *(20 minutes)*

Short Break (15 minutes)

Session 2: 1130-1230

- Q&A session on presented Paper related to the shipping industry (30 minutes)
- Existing shipping industry conservation activity and voluntary measures (30 minutes)

Light Lunch & Networking (1230-1315)

Session 3: 1315-1430

- Blue/Green corridor approaches to sea management (University of Copenhagen) (30 minutes)
- **Roundtable 1**: What defines good voluntary measures and collaborations, measures of effectiveness, and transferability (45 minutes)

Short Break (1430-1445)

Session 4: 1445-1600

- **Roundtable 2**: What measures would address Sargasso Sea vulnerabilities, and how can they be implemented and incentivised (45 minutes)
- Sargasso Sea GEF Project: Next steps (15 minutes)
- Wash up & close (15 minutes)

Finish by 1600

This meeting is gratefully funded by the Carlsberg Foundation through the InterAct Project - International Law-Making: Actors in Shipping and Climate Change (**Københavns Universitet**) and supported by **BIMCO**.

Appendix 2: Readout: 1st International Shipping Industry Consultation: "Strengthening the Stewardship of a Biologically and Economically Important High Seas Area – The Sargasso Sea".

Introduction

As part of the ongoing GEF-UNDP-UNESCO-IOC Sargasso Sea Project, **a shipping-industry focused consultation event was held at the London offices of BIMCO on the 5th of April 2024**. Facilitated by NLA International Ltd, the consultation was attended by representatives from BIMCO's London & Copenhagen Offices, the IMO, including from their GloFouling Partnership Project, Intertanko, CLIA, UNEP-WCMC, the Sustainable Shipping Initiative, IMarEST, and the UK Chamber of Shipping. There were several background briefings from members of the Project Team, plus the Sargasso Sea Commission Secretariat and Duke University's Marine Geospatial Ecology Lab. Although unable to attend this event, the International Chamber of Shipping, the World Shipping Council, Intercargo and the International Cable Protection Committee, have all undertaken to be part of this Project going forward. It is anticipated that more members of the International Shipping Industry will wish to join the Project as it continues into the future.

Aim

The aim of this event was to introduce the Project to the International Shipping Community and, as key users of the Sargasso Sea, discuss Project intent whilst highlighting potential opportunities for mutually beneficial participation. By engaging with this key stakeholder community at this early stage, the Project hopes to stimulate discussion on its various elements. The voice of the International Shipping Community will be essential in helping to determine appropriate voluntary governance and stewardship measures for all users of the Sargasso Sea, helping to deliver a collaborative approach towards the sustainable stewardship of this unique, iconic and globally important high seas ecosystem.

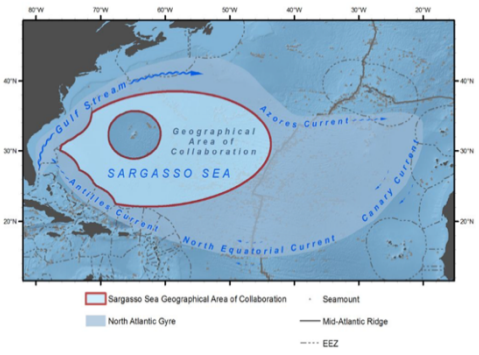
Background

The Sargasso Sea contains inherent ecological value and is a haven for biodiversity as both habitat and migratory corridor. Keeping the Sargasso Sea healthy and sustainably productive chiefly hinges on the **balance between appropriate utilisation and conservation of its natural resources.** This will be achieved by effective collaboration between all actors within its area undertaking conservation, stewardship, or commercial industrial activities.

Stewardship falls primarily to the Hamilton Declaration signatories, who balance conservation with sustainable use. This Declaration is a non-binding convention, collaborating with signatory governments and commissioners, and international organisations to conserve the Sargasso Sea. The Hamilton declaration and Sargasso commissioners are a new paradigm for high seas governance, working for just over a decade so far.

To achieve this conservation a clear understanding of human impact is required, together with knowledge of the potential benefits resulting from sustainable management practices, all within a collaborative and fair stewardship environment. **High seas areas like the Sargasso Sea can seem to belong to no one, but their future state is inextricably linked to Earth's health tomorrow and the associated global benefits.**

The Project



The GEF-UNDP-UNESCO-IOC Sargasso Sea Project seeks to strengthen stewardship of the Sargasso Sea Geographic Area of Collaboration (GAC). This area was intentionally drawn to remove all EEZs; it is a purely high seas area. An ambition of the project is to create a coherent stewardship approach, and the designation of the Sargasso Sea GAC avoids fragmented governance. The importance of the Sargasso Sea ecosystem has been recognised within the UN Biodiversity Beyond National Jurisdiction (BBNJ) discussions as an area of significance, which is a premise for implementing conversation measures. **This is seen as a 'flagship' project for BBNJ and may set the benchmark for future high seas stewardship elsewhere.**

The shipping industry, through the IMO, has been involved in the development of BBNJ from the beginning. IMO activity was key to building an awareness of the shipping industry, both in terms of its requirements and the existing mechanisms and conventions that shipping already apply to protect sensitive sea areas. **IMO engagement with the Sargasso Sea Project is highly desired and appreciated**; their continued participation will be crucial to developing and implementing appropriate stewardship and conservation measures.

Event Agenda

The morning included a Keynote address setting out IMO perspectives on the BBNJ Treaty & the Sargasso Sea, followed by a briefing on the Sargasso Sea Commission & The Hamilton Declaration. The Project was then introduced by the Project Chief Technical Adviser, which included an explanation of the 2 distinct phases of the Project; the SEDA and the SAP processes, and progress achieved to-date (detail below). A briefing on the role, methodology and importance of stakeholder engagement was followed by a briefing and discussion setting out BIMCO perspectives. In the afternoon, Data requirements, collection & sharing was discussed, and a further background briefing on Human Activity in Sargasso Sea was given by Duke University, MGEL. Possible voluntary mitigation measures and key stakeholders & their potential contributions were then discussed before the event was wrapped-up and next steps were set-out. **Each theme covered is précised below, together with some feedback and discussion from the attendees, and questions posed.**

The Socio-Ecosystem Diagnostic Analysis (SEDA) Process

The Project is currently undertaking its first phase – a Socio-Ecosystem Diagnostic Analysis (SEDA). This is built upon an established process used in and across EEZ boundaries – Transboundary Diagnostic Analysis (TDA)[6]. The TDA process has been used extensively in EEZs and over 40 shared river basins and ground water systems worldwide, but never in the high seas. The SEDA is an evolution of this mature approach to account for the unique nature of an Area Beyond National Jurisdiction (ANBJ) – the Sargasso Sea.

The SEDA process seeks to capture both the importance of the Sargasso Sea as an ecosystem, and its importance from a social and economic perspective. This analysis is very wide reaching, but at its core is evidence collection and analysis, enabling an assessment of the environmental (physical, chemical and biological) and socio-economic status (across sectors, towards an ecosystem valuation) of the area. A key element of the SEDA is to consider connectivity within and beyond the ABNJ system boundary, necessary to understand the importance of the Sargasso Sea GAC to external oceanic systems as well as to jurisdictional coastal areas.

A key area of discussion was the level of detail with which connectivity is analysed, which is an important decision point for the scope of the Project's SEDA and enduring monitoring thereafter. There was the view that **a balance of focus is required between analysis of the primary high seas area, and its internal connectivity, and the inclusion of the areas and nations most environmentally and economically connected to it.** Decisions of stewardship measures for the Sargasso Sea may potentially have global socio-economic impacts on key sectors. The room felt that **it was important for the SEDA to provide an holistic perspective, enabling the Project to assess and balance local and global benefits and impacts.** As an example, marine shipping and transport representatives described the impacts rerouting measures could have on carbon intensity indicators, and on small ports that perhaps rely on the cruise industry.

It was also indicated that **there is an ambition to consider the evolution of the Blue Economy in the Sargasso Sea GAC, including future infrastructure and activities, and its prospective impacts and value.** Ecosystem valuation is a significant process within the SEDA and will inform how an efficient collaborative stewardship approach may be built.

[6] Transboundary diagnostic analysis (TDA) is a procedure intended to provide a means of identifying the proximal, intermediate and fundamental causes of environmental problems and threats in shared (multilateral) water bodies. (https://www.sciencedirect.com/science/article/pii/S0964569111001487)

Full consideration of these aspects of connectivity and Blue Economy evolution will multiply the complexity of the SEDA. However, reaching an approach that satisfactorily addresses these points could enhance the role of this Project, and the SEDA process developed by it, as a potential model for future BBNJ implementation.

Communications and stakeholder participation is a key aspect of the SEDA and is critically necessary for the Project. A primary challenge with established ocean protection measures, such as Particularly Sensitive Sea Areas (PSSAs)[7] and Marine Protected Areas (MPAs)[8], discussed in more detail below, is enforcement and compliance. This challenge will be even greater in high seas areas, meaning that **participation and buy-in from the full stakeholder community is crucial.** A summary of key stakeholders will be included in the completed SEDA, including a detailed section on who the stakeholders are and their role going forward.

Developing the Strategic Action Programme (SAP)

Based on the evidence and findings from the SEDA a causal chain analysis will be carried out. This will inform socio-economic and ecosystem quality objectives and targets, and the monitoring indicators by which progress can be assessed – enabling better stewardship measures to be put in place for the Sargasso Sea GAC.

Up front it was recognised that **the science underpinning such an analysis is unevenly mature and unevenly distributed.** The industry view was that **there will be unknowns regarding the impacts of shipping on aspects of marine biodiversity.** For example, the subject of noise pollution was raised, whereby there are associations, but a definite causal link is hard to establish. It will be necessary to define the standard of evidence required to justify objectives and targets. Although adopting a Precautionary Approach[9] has been the norm for many decades, in this case it may be overly cautious. **A weight-of-evidence approach**, taking a pragmatic view of where evidence and association is strongest, has been successfully used in other environmentally sensitive scenarios[10]. It **may provide the right balance as science and evidence is matured in the highest priority areas.**

The development of these objectives and targets needs to be aligned with the expectations of all stakeholders and will be captured in the negotiated document that is **the Strategic Action Programme (SAP)**. It **will encompass the specific measures** – negotiated and co-owned by the stakeholder community – **to be applied in the Sargasso Sea by the Project.**

It was the view of the room that **the SAP should not only look at addressing problems identified by the SEDA, but also on realising opportunities that enhance the lasting environmental and socio-economic value of the Sargasso Sea GAC.** Often negotiated measures focus on risk and 'fixing' problems, but this new high seas context may allow an opportunity framing to be embedded in the SAP process, leveraging emerging Blue Economy thinking; risks can create not just threats, but also opportunities.

The Sargasso Sea Project is seen as a 'flagship' project for BBNJ. This underlines the importance of participation to ensure the SEDA and SAP processes are not only acceptable to shipping industry stakeholders, but actively include their perspective and knowledge. **What is demonstrated in the Project should be translatable and scalable to future BBNJ initiatives. Leadership** is being shown by the Sargasso Sea Commission, and it is the Project's view that this **should be shared and co-owned by the stakeholder community, enabling all involved to take the lead in the development of voluntary measures.**

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[7] Particularly Sensitive Sea Areas (https://www.imo.org/en/OurWork/Environment/Pages/PSSAs.aspx)
[8] Marine Protected Areas (https://www.iucn.org/resources/issues-brief/marine-protected-areas-and-climate-change#:~:text=Marine%20Protected%20Areas%20(MPAs)%20are,for%20long%2Dterm%20conservation%20aims)
[9] https://unglobalcompact.org/what-is-gc/mission/principles/principle-7
[10] https://www.researchgate.net/publication/292139133_Large_Marine_Ecosystems_and_associated_new_approaches_to_regional_transboundary_and_'high_seas'_management

Data: requirements, collection & sharing

The provision of data is necessary for all elements of the Project, from understanding the ecosystem and socio-economic status of the Sargasso Sea GAC during the SEDA process, to enduring monitoring to support the implementation and maintenance of agreed measures. The necessary types of data are diverse, ranging from the physical, biological and chemical, to economic metrics and those representing the use and resilience of the ocean space.

Examples of key factors to monitor include ocean temperatures, salinity, acidification, current velocities, and the presence of local and migratory species. Furthermore, these data are required over a wide area and with appropriate temporal resolution; there is a 'Big Data'[11] challenge to monitoring and governing the high seas. **The participation of both the Guardians[12] and the Users[13] of the sea space in data collection, sharing, analysis, and potentially co-financing, will be necessary to meet this challenge.** This is especially true since nation states do not have the same infrastructure and mechanisms to support this activity as they do within their EEZs.

Data: collection & ships of opportunity

This is an area where the shipping industry may be able to participate and contribute substantially. **There are already many ships of opportunity participating in ecosystem data collection.** This is often done on a deployment basis, where a vessel is the deployment mechanism for floats or other data collection systems but does not have to directly handle data collection and/or transmission. This is typically employed for oceanographic and meteorological data, but rarely for biological or human. It was reported **these activities have also been seen to benefit crews, relieving boredom during voyages and providing positive feedback.**

That said, **there were concerns about the trustworthiness of data collected through 'citizen science'.** The shipping industry would not want to collect data that might not meet the standards necessary for use; **improved automation in data collection** (whether mechanical or digital) **will reduce this risk.**

Currently data collection is often done on an individual basis with and for individual scientific institutions. Sometimes this results in duplicate data collection requests being made to the shipping industry by different organisations and groups. This **lack of consolidation increases friction and decreases data re-use, a single approach with centrally defined data priorities would make participation more feasible.**

Data: sharing

Modern vessels are equipped with considerable sensors to support their normal operations. These may provide data valuable to ecosystem monitoring and analysis; however, **challenges of data sensitivity and sharing must be addressed to make these available.**

Openly sharing data on environmental protection, safety and security is possible – the cruise liner industry actively does this already. Issues of data rivalry and competitive risk are mitigated through a trusted data partner; a legal entity that anonymises and collates data, subject to strict anti-trust and confidentiality rules. **A similar, unified, approach** has not been tested by the wider shipping industry but **may be necessary to achieve consistent data sharing in support of the Project, or future BBNJ activities.**

Beyond data collection, **this Project will also need to be supported by a data platform designed for long-term scientific monitoring**, able to support specific requirements of the SEDA, SAP and consequent implementation processes.

Overall**, data collection and sharing represents a natural opportunity for participation. But clarity is needed in key areas to enable this at scale.** Some of these are **technical**, such as defining mechanisms for data collection and transfer, responsibilities on data quality, and improving or making available automation tools.

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[11] http://www.sargassoseacommission.org/our-work/workshops/nlai-big-data-report

[12] Guardians – those principally focused on the conservation of the Sargasso Sea, either directly or indirectly.

[13] Users – those who realise direct or indirect commercial gain from legal exploitation of the natural resources within, or that pass through, the Sargasso Sea.

However, others require **strategic consideration**, such as the **burden** data collection requirements may place **on crews and crew training**, the **potential costs to ship owners, and** the potential for **legal issues** such as from regulatory barriers or privacy concerns.

Most importantly **there is a lack of clarity of the derived benefits.** Ocean observation undoubtedly benefits the shipping industry as well as others, but **these** benefits **need to be better articulated.** Opportunity for bi-directional data and knowledge exchange may form part of this, especially if shipping may contribute data to wider analysis that in turn helps the industry identify new operational models or mutually beneficial changes.

To address this **the project may benefit from a data and information management strategy**, capturing how data can and should be provided, how it is collected and managed, and strictly defining the nature of outputs derived from this data. This strategy may define the role and implementation of a trusted data sharing partner designed to enable industry-wide data sharing. A sophisticated approach is clearly required to overcome concerns of data rivalry and competitive value, but examples show this is not insurmountable and **there are achievable forms of data collection already underway.**

The Environmental, Social & Governance (ESG) lens

The activities of the Project, and the opportunities for participation, may also be viewed through an Environmental, Social & Governance (ESG) lens. ESG is a growing priority for the largest commercial shipping businesses[14]. **Participation in voluntary activities, such as** platform of opportunity **data collection, is a component of ESG responsibilities** and is recognised as such in emerging formal structures.

Although ESG is on the agenda and growing, it is inhibited by a lack of a quantitative framework. This is especially true since the cost of implementing ESG measures is often high. The appreciation of ESG also varies significantly between organisations. Currently ESG is purely voluntary, although this is changing for the EU[15].

More generally, the points of view on the costs of shipping are evolving to consider environmental and ecosystem aspects as well as traditional economic metrics. This is a gradual change and is not one that shipping can make in isolation. These shifts in priorities and perspectives provide a new way to contextualise voluntary participation in the Project, and to assess the value this provides.

Developing and implementing measures

A main topic of discussion was the nature of measures that might be discussed during the SAP process and consequently implemented, including **whether these measures are likely to be novel or traditional, voluntary or mandatory, and how the costs** of implementation **might be borne.**

It was **important for the industry to understand what area-based management tools[16] might be considered appropriate for the Project**; whether they are likely to be established mechanisms such as PSSAs or MPAs, or something different, and what guidelines or regulations might be associated with them.

There was a view that **it is too early in the Project to specifically answer these questions.** Discussion of potential measures should form part of the SAP negotiation, which will require stakeholder participation. Before this, the causal analysis and supporting evidence must be established by the SEDA. Hence, the objective of the discussions in this consultation was to highlight pathways and foresee challenges, but it was **far too early to define effective, balanced, measures.**

An important principle to developing measures is to ensure they are incremental. Mandatory measures already exist that may address some of the identified threats, and there are other existing mechanisms that may be employed before new ones may need to be created. **New voluntary measures need only capture the additionalities not accounted for already.**

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[14] https://www.zerocarbonshipping.com/publications/the-esg-playbook-for-shipping/
[15] https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_4043
[16] https://www.highseasalliance.org/wp-content/uploads/2021/04/ABMTs-BRIEFING-2_-How-do-MPAs-and-other-ABMTs-differ_.pdf

The instruments of the IMO are internationally agreed and binding; they apply to all ships throughout their voyage (excepting domestic shipping) and are implemented through flag ports and coastal control. **New instruments may be needed to support and implement BBNJ measures,** and **the Project may help assess this.**

Particularly Sensitive Sea Areas

The most directly relevant instrument may be PSSAs, for which special requirements apply. When a PSSA is defined the protective measures that are needed to mitigate the area's sensitivities are also defined (e.g., vessel routing, operational discharges, accidental or intentional pollution, physical damage to marine habitats). Depending on the nature of the sensitivities revealed by the SEDA, this approach may be appropriate. **Currently there are no PSSAs on the high seas, nor has there ever been one.** However, PSSAs are not specifically limited to EEZs, so **creation of a high seas PSSA could be possible.**

A key benefit of using **PSSAs** is that they **are a familiar process to the shipping industry under the IMO.** The PSSA concept also provides clarity by the fact that ships are regulated by one body, providing the confidence that the industry needs to encourage compliance. **PSSA text** is also very carefully **constructed to establish the balance of interest between environmental protection and the needs of international shipping**, which must be a key property of any negotiated measures.

To establish **a PSSA**, it **must be proposed by IMO member states; the Project should consider how this might be achieved.** The critical piece to establishing a PSSA will be the causal link showing why shipping poses a threat against specific identified sensitivities. This must be strong enough to convince the 176 member states that the proposed measures would sufficiently mitigate these sensitivities.

Voluntary measures

Voluntary measures may also be necessary to address threats identified by the SEDA and are a possible outcome from the SAP process. **Voluntary measures are already an established approach in some areas, for example regarding vessel speeds to minimise whale strikes**, and informal monitoring and reporting approaches have been tied to these leading to open reporting and accountability. However, there is a view that current approaches can be improved. There is concern that there are too many voluntary measures and that they lack coherence across ocean areas. **Considering that this Project may inform BBNJ implementation, a view to coherence from the start may be beneficial, articulating voluntary measures that may be consistently replicated elsewhere if appropriate.**

There can be a real challenge to maintaining overview of voluntary measures and regional differences, so **the friction of voluntary compliance could beneficially be reduced.** This may be facilitated by a dedicated liaison role or function, similar to how a port agent can make environmental compliance easier but dedicated to the high seas – first perhaps for the Sargasso Sea GAC, and then expanded as required with BBNJ implementation.

There is also a legal consequence to accepting voluntary measures that must be considered, particularly if others do not. **Accepting voluntary measures may add costs to voyages**, there is precedence that the carrier is liable for these if its behaviour is inconsistent with other vessels in the same area. Being the exception in adopting voluntary measures may result in liability, this risk must be understood and appropriately mitigated. Industry could also anticipate that **measures that begin as voluntary might eventually become mandatory.** This will need careful consideration within the SAP negotiations.

The **cruise liner industry** raised a **specific concern about how rapidly any new measures might impact them.** They develop itineraries 2-3 years in advance, meaning that implemented measures would affect cruise liners earlier due to their planning requirements. Depending on the nature of measures to be discussed, this may need specific consideration and consultation.

Costs & Incentives

Irrespective of the form of measures **there will certainly be costs for implementation and monitoring**; this will affect all parties include the industries adopting the measures. For example, large rerouting measures prohibiting entry to parts of the high seas is likely to result in a clear commercial cost. This needs to be understood, and the associated costs must be allocated in an acceptable manner.

If the Project is **to encourage wide uptake of voluntary measures, incentives may be key.** This may also be an **important part of growing data collection and sharing.** As the Project moves forward, it will be important to envisage what incentives are appropriate to tie to voluntary measures, and how they could be sustainably enabled.

An alternative way to frame this may be in terms of future economic costs and risks. If ecosystem sensitivities go unaddressed, they may result in future measures that are far more costly than voluntary ones today. **A proactive approach**, therefore, **may minimise both cost and risk** whilst delivering significant environmental and social value.

The GLO partnership projects may also provide a valuable reference for implementation. The Global Industry Alliance (GIA)[17] public-private partnership initiative has focused on realising commercially feasible solutions to critical marine and maritime issues. This has taken a self-financing private sector approach, where participating organisations contribute a small quantity to the IMO secretariat to organise an industry alliance community of interest, to share solutions and understandings.

In sum, this **Consultation presented two avenues for implementing measures for the project to consider.** One is **regulatory** (e.g., PSSA) with requirements **enforcement and mandatory compliance**. The second is **voluntary**, likely **backed by incentivisation**, which needs to be investigated once the SEDA is concluded.

Conclusion & Next Steps

This consultation was the second of the Project – the first predominantly involved the Guardian community – but this was the first specifically focused on engaging key Users of the Sargasso Sea in discussions surrounding potential future voluntary or regulatory stewardship measures; there will be others.

The sense was that it was a good beginning, with a great deal of energy, positivity and curiosity in the room. In answer to a question ***"What should the Project do to not upset the shipping industry?"*** one participant simply responded: ***"This - exactly what you are doing now!"***

But there is a long way to go, and many data to be gathered and analysed to develop a clearer understanding of how best to strengthen the Stewardship of this biologically and economically important high seas area. **The common heritage of mankind means that, far from the high seas being unowned, there is a shared ownership by humanity of the world's oceans.** This underlines the **critical need for negotiation, compromise, and co-ownership in the development of measures, and a fair approach to implementation**.

The next consultation for the Project is hoped to be in mid-2024 with the Fishing Industry, another key user of the Sargasso Sea. Following this, possibly during the last quarter of 2024, the Project will seek to bring as many Project key stakeholders together as possible, both Guardians & Users, to broaden and deepen the Projects understanding of human activity in the Sargasso Sea and its potential impact on the unique and iconic ecosystem it is home to; **the Project will be grateful for your continued participation.**

[17] https://www.glofouling.imo.org/gia