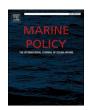
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# Direction, not detail: Progress towards consensus at the fourth intergovernmental conference on biodiversity beyond national jurisdiction

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#### ABSTRACT

After a two year delay caused by the COVID-19 pandemic, the fourth intergovernmental conference (IGC-4) in the negotiations for a new UN treaty to address the conservation and sustainable management of biodiversity beyond national jurisdiction (BBNJ) took place in March 2022. This meeting differed substantially from previous IGCs in terms of process, with much of the discussions occurring in 'informal informals,' or off-the-record meetings open only to delegates and registered observers. Additionally, in-person participation was extremely limited and observers only had access to web broadcasts, i.e., no in-person interactions with delegates. A draft text of the treaty was circulated in advance and provided the basis for discussion and negotiation at the meeting. This paper examines IGC-4 in line with previous analyses of the first three IGCs, tracing the process and outcomes to date, aiming to understand the factors and players that are building a new BBNJ agreement. Key themes explored include marine genetic resources (MGRs), area-based management tools, including marine protected areas (ABMTs/MPAs), environmental impact assessment (EIA), and capacity building and transfer of marine technology (CB/TMT). Some progress toward consensus has been made, buoyed by intersessional discussions, but several sticking points remain with regard to definitions, content, and processes enshrined in the draft treaty, and a fifth IGC is scheduled to take place from 15 to 26 August 2022.

### 1. Introduction

After a long hiatus due to the COVID-19 pandemic, the 4th session of the Intergovernmental Conference (IGC-4) of the Biodiversity Beyond National Jurisdiction (BBNJ) negotiations convened from March 7–18th at the United Nations headquarters in New York. The BBNJ process intends to produce the third implementing agreement to the United Nations Convention on the Law of the Sea (UNCLOS), and must be "fully consistent" with the framework Convention [36]. The goals of the emerging treaty are broad – the conservation and sustainable use of marine biodiversity beyond national jurisdiction – but the agenda is circumscribed. The treaty will cover four main issue areas: (1) marine genetic resources (MGRs), including access and benefit-sharing, (2) area-based management tools (ABMTs), including marine protected areas (MPAs), (3) environmental impact assessments (EIAs), and (4) capacity building and the transfer of marine technology (CBTMT). This

paper assesses the progress in the negotiations so far, identifies key areas of disagreement, critically evaluates the current draft text, and identifies patterns and trends in the negotiations that shed light on how power, interests, and ideas are influencing the emerging text of the new treaty.

Much has happened since IGC-3 [6]. The two and a half year intersessional period represented a break from formal negotiations, but not a break from the BBNJ process itself. Non-governmental organizations and groups of interested states held numerous informal meetings to discuss key issues, such as the series of 'High Seas Treaty Dialogues' which began before IGC-4 was canceled, but continued virtually throughout the pandemic until December 2021. Starting in September 2020, the negotiation leadership organized a series of informal interactions via Microsoft Teams, including synchronous webinars and limited periods for asynchronous commentary on particular questions and text proposals. The intersessional work did not produce a revised draft text, but still impacted the course of negotiations. Other scholars –

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most notably the MARIPOLDATA project led by Alice Vadrot – have studied this inter-sessional process. Using a survey of BBNJ participants in May 2020, Vadrot et al. found general optimism about the ability to use the intersessional period productively, especially on more technical and practical parts of the treaty, but differing views on the utility and potential of online platforms [37] . Equitable access, and the ability to deal with difficult political topics, were common concerns.

Access concerns persisted in IGC-4. Although IGC-4 took place inperson, the COVID-19 pandemic shaped its modalities in ways that affected transparency. A mere three weeks before negotiations began, President Rena Lee held successive briefings with representatives of inter-governmental (IGOs) and non-governmental organizations (NGOs) to share information about access. Member states were limited to  $\ensuremath{\mathbf{2}}$ people<sup>1</sup> in the negotiation room, and no observers (including from IGOs or NGOs) would be allowed. This decreased the possibilities for academic research, including on-site, in-person interviews and ethnographic observations, and importantly, interventions. However, a WebEx video link was provided to all registered participants, and although this did not allow participation via verbal interventions, observers were allowed to submit written statements and text proposals the evening before each session. And crucially, even the 'informal informal' sessions would be observable via video link. This represented a significant improvement to transparency over IGC-3, where IGO and NGO representatives had to determine among themselves who would get only 10 seats (5 for each group) within the 'informal informal' rooms [6]. In the second week of IGC-4, COVID restrictions were lifted somewhat and at that point, NGOs and IGOs were allowed 3 observers each in the room, and the mask policy shifted from mandatory to optional. Unfortunately, many NGO groups - including this research team - were unable to plan ahead for this unforeseen change in policy, and therefore still unable to attend in person.

## 2. Methods

This article is the fourth in a series of analysis papers that are part of a larger, on-going project studying the BBNJ process. Our overarching research question is "what explains (or will explain) the outcomes of the final BBNJ treaty?" including both the design of the agreement and how many (and which) states choose to ratify it. We are especially interested in the ideas, actors, and interests that influence the negotiations. Our primary method of analysis is 'process tracing,' which involves developing theoretical ideas through the observation of sequences, patterns, and trends [1]. Because the draft BBNJ agreement is a 'moving target,' and key discussions often take place in closed sessions, it can be difficult to follow the process. Our approach therefore takes advantage of multiple sources of information and types of access, which helps us to trace the process and cross-check our findings. Because the modalities of negotiation have evolved from one IGC to the next, so to have our research methods.

The IGC-4 programme of work, and especially the COVID restrictions, created new challenges for research about the BBNJ process. COVID-restrictions prevented us from being able to conduct semi-structured interviews during IGC-4, but the WebEX video link allowed us to observe 100% of the sessions. During each session, our team had at least 2 observers working together to take detailed notes on interventions, as part of a database we are constructing for the entire BBNJ IGC process. During the first three IGCs, most sessions were carried out as 'Working Groups,' such that researchers could report the positions and analyze the interventions of specific states and coalitions ([32,8,25]). In contrast, IGC-4 was almost entirely composed of 'informal informals.' Although in practice these ran essentially the same way as Working Groups, they were not streamed via UN Web TV, and were only

virtually accessible to registered participants via WebEx. Negotiation leadership requested that observers not report details of who said what during these informal informals. This is intended to enhance the possibilities for compromise, giving coalitions and delegations the freedom to express where they might be flexible, without concern for political repercussions at home. However, this modality makes it very difficult for researchers to convey what is actually happening at negotiations with a broader audience. In this paper, we do our best to share information about the progress of negotiations, without violating the request of the leadership to not divulge too much information. We therefore refer to issues and topics that were discussed in a general manner, and not specific to any individual state or coalition. Any specific naming of countries or coalitions reflects positions that are publicly available on the BBNJ website, which includes text proposals circulated as 'Conference Room Papers' as well as statements voluntarily uploaded by delegations, and the oral reports of the facilitators.<sup>2</sup>

## 3. 'Direction, not detail'

IGC-4 had a notably different tenor and tone to previous sessions. Interventions focused on both the revised draft text and sets of questions formulated and circulated by the leadership during the session. This approach had a flexible feel - for example, mid-way through the IGC, delegates asked President Lee to circulate questions the night before, and she graciously obliged. Although many interventions included detailed comments on and proposals for the text, similar to IGC-3, there was also a return to more general comments about the design of the agreement. As President Lee often repeated, "we're looking for direction, not detail." States signaled their agreement with one another more often, even taking the time to list particular coalitions and delegations they agreed with. This included more qualified comments about text proposals they "consider favorably" or could "look on positively." As delegations shared their positions and opinions, they also noted their degree of flexibility on an issue, as per President Lee's request. This approach may serve both cooperative and particularistic ends. On one hand, it signals and boosts preferences around which consensus is forming. On the other hand, highlighting groups that agree with you, and indicating your willingness to be flexible on some issues, can be understood as a means of boosting the credibility of both the speaker and their stated preferences.

This change in tenor left participants and observers with an undeniable feeling of progress, although at least one additional IGC will be needed to finalize the agreement, scheduled for August 2022. The Earth Negotiations Bulletin summary of negotiations noted that many participants lauded the productivity of IGC-4 [8]. This feeling of progress is in stark contrast with popular media reports that suggest that negotiations had "collapsed". We note several possible, or partial, explanations for this apparent progress. First, intersessional work was often referred to by delegates as providing important opportunities to reconsider their initial positions, consult with domestic experts, and build consensus via outreach to other states. These references were often connected to statements about the valuable contributions of NGOs, who have played an important consultative and convening role. Second, urgency around global environmental problems has increased since 2019. At the UNFCCC COP-26 in Glasgow, for example, the view that 'ocean action is climate action' was finally translated into formal policy commitments contained in the Glasgow Climate Pact [24]. Shortly thereafter, the IPCC released part of its Sixth Assessment report which emphasized the critical need for conservation of 30-50% of land, freshwater, and ocean areas. These developments may have encouraged states to try to do more, quickly, and align themselves with other agreements under negotiation or implementation. This urgency is especially evident in the 'High Ambition Coalition,' a commitment made by 20 states and the

 $<sup>^{1}</sup>$  This was described as "1+1" representatives, signifying that one main speaker would be supported by one issue area specialist.

<sup>&</sup>lt;sup>2</sup> These resources can be found at <a href="www.un.org/bbnj">www.un.org/bbnj</a> under "Documents"

European Union's 27 Member States at the February 2022 One Ocean Summit to "swiftly conclude the BBNJ Treaty in 2022."

However, urgency to conclude an agreement cannot create consensus. It may therefore be that the positive feeling at IGC-4 represents a false sense of progress, rather than actual significant progress toward a final treaty. Two alternative explanations should be taken into account, in order to temper the optimism about completing treaty negotiations in 2022. First, the format of negotiations could explain the apparent degree of movement. The revised draft text3 had been streamlined relative to the first draft considered in IGC-3, such that interventions were less laden with precise references to specific options and alternatives in the draft text. The 'informal informal' format generated more back-and-forth exchanges, and facilitators were more likely to pivot in response to the direction of discussions. Second, the agenda was circumscribed, and arguably the most controversial topics were not even covered at IGC-4, except obliquely. As one Facilitator noted, "nothing has been agreed until everything has been agreed, and we are a long way from that." In short, it is easier to build and express consensus on direction than detail. And indeed, there are still "a number of ambiguities and omissions...as well as incomplete provisions" in the

The following sections consider each of the four main issue areas and the topic of institutional arrangements in turn, as discussed during IGC4. This enables us to assess the progress of negotiations in each area, evaluate the likelihood of consensus-building on key topics, and analyze the factors that are influencing trends in the design of a BBNJ agreement.

#### 4. Elements of the BBNJ package

## 4.1. Marine genetic resources

"I want to remind everybody of my favorite word in all its permutations – you can flex, you are flexible, you have flexibility. I hope to hear that word a lot in all permutations".

- President Rena Lee at the start of the MGRs workstream.

MGRs remain one of the most contentious issue areas, for three reasons. First, the topics of access and benefit sharing are riven with ideological positions concerning the acquisition and status of property, seen especially in the opposition between the concepts of common heritage and free market enterprise. The G77 + China coalition continues to insist that the common heritage of mankind (CHM) principle is the "underlying legal and moral principle" for MGRs, while technologically advanced countries emphasize the need to not impede or discourage research and development by private entities. In the background is the shared knowledge that patents associated with MGRs are held by a small number of dominant private and national actors [4,1]. Second, the institutional arrangements proposed to manage MGR access and benefit sharing vary widely in their degree of regulatory requirements. Even if the ideological dispute over guiding principles was resolved, there would still be a need to establish clear rules for storing, regulating, and monitoring MGR use . Many states are unenthusiastic about the degree of complication and intervention necessary to achieve preferred outcomes related to MGRs, especially compared to existing marine scientific research practices [11,18,31]. Third, the technical, practical, and definitional challenges associated with MGRs as an object and bioprospecting as an activity persist, and are connected both factually and conceptually to the first two areas of contention [19,18,10, 22]. All of these patterns were evident at IGC-4, and much of the core debate was centralized on the definition of terms in Article 1. These fundamental issues suggest that the MGRs part of the BBNJ agreement may be the most difficult to achieve consensus on.

#### 4.1.1. Access vs. Collection

President Lee took advantage of an early finish to CBTMT discussions to begin with an hour of MGR discussion on day 2 of the negotiations. Due to the inability of the previous Facilitator to attend IGC-4, President Lee ran the MGR workstream herself, beginning with the examination of Article 10 of the revised draft text which concerns collection and/or access to MGRs. Early statements noted significant movement in the inter-sessional period, including the circulation of texts. Yet major disagreements persist about whether the BBNJ agreement should regulate "access to" or "collection of' MGRs. Major developing state coalitions expressed support for "access," while a large number of advanced developed states supported "collection" (including text proposals by the EU and US). A small number of states preferred to use both, and a small number said they were agreeable to either, as long as the definition was precise. One state with substantial investment in advanced oceanographic research said they could not support any regulation or limitation of MGR access or collection, which they argued would be inconsistent with UNCLOS. Two developing states argued forcefully against this position, with one saying that UNCLOS was based on very limited knowledge, should not be held sacred, and cannot remain steady given the dynamic nature of the ocean. The other developing state pointed out that UNCLOS contains both the CHM and freedom of the seas principles, and the maximalist tendency towards freedom of the seas is the basic reason over-exploitation has occurred, and therefore "not as golden as we present it."

## 4.1.2. Notification vs. Permitting

The modalities for regulating access/collection are typically discussed as a notification or permitting scheme, with the latter representing a more onerous requirement to seek out and receive approval before acquiring or utilizing MGRs from ABNJ [21,29]. During IGC-2, developing country coalitions such as the Pacific Small Island Developing States (PSIDS) favored a permit or license scheme as a means to ensure effective monitoring, management, and review [23]. During IGC-3, developed states such as Japan, Korea, the United States and Russia not only opposed the idea of permits, but argued that prior notification would be an unacceptable impediment to bioprospecting research [6]. By IGC-4 there was significant movement on both sides, towards a notification system. One major developing country coalition, and one major developing country, still supported permitting/licensing but expressed openness to a notification system. Several smaller developing country coalitions, along with a large number of developed countries, expressed support for notification, sometimes emphasizing that it needed to be mandatory. One particularly active delegation noted the flexibility and movement towards notification and expressed gratitude to those who had altered their position. The clearing house mechanism would be the site of notification, through an "open and self-declaratory system" that would, as one coalition pointed out, depend on the "good faith" of users.

Additional discussions focused on what notification would include, and the benefits or drawbacks of requiring two-step notification, with reporting occurring both before a cruise and after access/collection. In one exchange, a delegate representing developed countries argued that "best practices" for notification can be found in existing scientific funding mechanisms, where researchers provide information about a cruise and its purpose in order to compete or apply for support, with a requirement to report on the nature and impact of what they found. Indeed, requirements for traceability and disclosure are quite common in professional marine scientific research [1]. A developing country asked for clarification about which funding agencies and whose best practices were being referred to, implicitly making the point that such processes are generally found in advanced developed countries. And of course, best practices evolve. The EU text proposal for Article 13 would have the Scientific and Technical Body (STB) report to the Conference of Parties (COP) on changes in best practices for scientific planning and reporting. Whether or not evolution of best practices in grant funding

 $<sup>^3</sup>$  The revised draft text used for IGC-4 can be found on the BBNJ website. Its document reference is A/CONF.232/2020/3

would translate into changes in regulatory policy in the BBNJ agreement would then be up to the COP.

## 4.1.3. Benefit sharing and intellectual property

The requirements for post-cruise notification were often connected to the idea of benefit sharing, as in the text proposals by the UK and the Coalition of Like-Minded Latin American Countries (CLAM) which would make access to ex situ (physical lab samples) and in silico (digital information) MGRs open and publicly available. Much of the benefitsharing debate was, however, compressed into the last hours of the MGRs discussion or not addressed at all during IGC-4. Most notably, the African Group, with support from CLAM, the Caribbean Community (CARICOM), and the PSIDS, introduced a proposal for an Access and Benefit Sharing Mechanism that would include requirements for benefit sharing across different stages of MGR access, collection, and utilization. The Mechanism would also include the creation of a "lean but representative body that will provide the necessary expertise in this technically complex but fundamental issue and provide the necessary assistance to the Conference of the Parties in decision making on benefits." The introduction of this proposal, which is explicitly backed by 94 developing countries, was initially met with silence, and then tentative support, but no immediate or direct engagement. It may be especially difficult to for developed states to accept because it entails the creation of a new body with decision-making authority.

Article 12 on Intellectual Property Rights (IPR) - which is critically important for defining the when and how of benefit-sharing - was not directly addressed in IGC-4. Because existing IPR rules have been developed with land-based extraction in mind, there is a fair amount of 'wiggle room' in terms of new rules for patent claims on MGRs [39]. Without direct discussions on this portion of the agreement, it is difficult to assess the degree of progress on the MGR issue area because IPR touches on both the ideological disagreements and practical challenges that obstruct consensus building on this topic [22,9,25]. The basic difference in approaches was evidenced by the small number of text proposals submitted on Article 12, despite the draft provision not being part of the official discussion during IGC-4. The draft treaty article, as well as a proposal by CLAM, maintains a focus on ensuring that IPR does not restrict benefit-sharing. The proposals by the EU and UK take the opposite approach, and include revisions that would shift towards ensuring that benefit sharing does not contradict or undermine the existing system of IPR. These differences in emphasis seem slight but represent different directions for the benefit sharing provisions, which can also be seen in the debate in Article 7 about whether this section should "promote" or "ensure" benefit sharing of MGRs. While the G77 + China coalition unequivocally support "ensure," developed countries are more likely to support the idea of promotion. In the revised draft text for IGC-5, Article 7 says "promote" three times and no longer uses the word "ensure." This suggests that the draft text on benefit sharing is evolving in the direction favored by developed states.

## 4.1.4. Kicking the can down the road?

During IGC-4 there was a notable trend towards shifting important decisions to the COP, especially as concerns benefit sharing at the stage of utilization or commercialization of MGRs. This approach may make it easier to build consensus during the BBNJ negotiations, but creates a weighty and contentious agenda for the COP. This model has been used in ocean governance before. Setting up the structure and framework for decision-making and access rights in the treaty, but deciding the specific rules and modalities later, would mimic the relationship between UNCLOS and the International Seabed Authority, which is just now formulating the rules for benefit sharing from mineral resources almost two decades after its establishment. However, many developing states are concerned about what delayed decision-making would mean for the actual prospect of benefit sharing. One small developed country made a powerful statement about how kicking such important decisions to the COP would not actually make the negotiation process easier, but rather

extend that process into another forum (the COP) where meetings may not be as regular and focused on this issue compared to the BBNJ process.

## 4.2. ABMTs including MPAs

"We have been able to see directions that could lead to consensus because you have all engaged in a dynamic way, responding to proposals and demonstrating the President's favorite word [flexibility]."

Facilitator Renée Sauvé at the start of the ABMTs/MPAs workstream.

In the time elapsed since the IGC-3, the global community has moved towards a new post-2020 global framework for biodiversity conservation under the UN Convention on Biological Diversity (CBD), aiming to protect 30% of the planet by 2030 (known as the 30  $\times$ 30 commitment). This target adds some pressure to the BBNJ ABMTs discussion with respect to establishing effective high seas MPAs. While the jurisdictional scope of the CBD's provisions to protect biodiversity is limited to areas within national jurisdiction, the CBD does have an influence on the wider oceans regime, and it governs the behavior of its Parties with respect to processes and activities undertaken in ABNJ related to biodiversity protection. 4 Specific contributions from CBD processes include the creation of criteria for identifying sensitive areas, involvement in regional workshops focused on MPA designation, and establishment of global targets for biodiversity protection [26]. Its overall goals are unlikely to be achieved in ABNJ, however, without the legally-binding BBNJ agreement [3].

The area-based management tools, including marine protected areas (ABMTs/MPAs) theme comprises Articles 14–21 of the draft treaty, only three of which were discussed at IGC-4: Article 15 on International cooperation and coordination, Article 16 on Identification of areas requiring protection, and Article 19 on Decision-making. Issues pertaining to definitions, within Article 1 of the draft text, were also addressed. However, this left five Articles without further discussion at the meeting, meaning progress on the issue area was overall limited. This limited debate also makes it more challenging to determine how close the ABMTs part of the agreement is to achieving consensus on its unsettled provisions. The informal informals on Articles 15, 16, and 19 were facilitated by Renée Sauvé (Canada) and the discussion on definitions (Article 1) was facilitated by President Lee (Singapore). Observers at the meeting noted that some of the earlier entrenchment on issues related to ABMTs and MPAs appeared to soften at this IGC [8].

## 4.2.1. Definitions (still) matter

As has been the case throughout the BBNJ negotiation process, agreeing on definitions for ABMTs and MPAs has been challenging, including whether MPAs are "included" as subset of ABMTs and how to define the "sustainable use" of biodiversity beyond national jurisdiction [26,34]. Because the conceptual shift from MPAs to the broader category of ABMTs is a relatively recent phenomenon, definitional confusion has yet to be resolved elsewhere [26]. The issue of whether to explicitly include other effective area-based conservation measures (OECMs) also arose again, but only briefly, and it seems well-understood that these are not MPAs but rather ABMTs [6]. A more precise definition of ABMTs, including their mechanisms, modalities, and goals, would help prevent the new agreement from undermining existing approaches, such as fisheries closures instituted by Regional Fisheries Management Organizations (RFMOs), Areas of Particular Environmental Interest designated by the International Seabed Authority (ISA), and Particularly Sensitive Sea Areas (PSSAs) established through the International Maritime

<sup>&</sup>lt;sup>4</sup> See Article 4 of the Convention on Biological Diversity at <a href="https://www.cbd.int/convention/articles/?a=cbd-04">https://www.cbd.int/convention/articles/?a=cbd-04</a>

Organization. Because these existing sectoral organizations are relatively territorial about their mandates, resolving the legal and institutional relationship between them and the BBNJ agreement is a key condition of its future effectiveness [26].

## 4.2.2. Identification of areas

Focused discussion on ABMTs/MPAs began with Article 16, including a typical debate over the pros and cons of including language on taking a precautionary approach versus the precautionary principle. Not only in these discussions, but in the field of international environmental law more widely, the precautionary approach is viewed by some as being more in line with risk assessment and cost-benefit analysis, and thus preferred over the precautionary principle, which some view as implying legal strength and warranting further clarification [7]. Some delegates pointed out that it would be more in keeping with other ocean-focused agreements to keep with the precautionary approach. Nevertheless, the language in the most recent draft treaty refers only to "the application of precaution" – weaker language than a precautionary approach, and a concern in terms of clarity and keeping with the Rio Principles. Because "application of precaution" has an unclear meaning and few reference points, it remains to be seen whether it will be interpreted as more or less objectionable compared to the precautionary "principle" or "approach."

There are no pre-existing formal international rules for the quantity, quality, and type of knowledge needed to establish ABMTs/MPAs [26]. Related to this and in line with discussions in other fora on ocean and coastal issues, there were some differences regarding the quality of information needed for site identification, where some favored pointing to the "best available science" while others preferred broader "scientific information," as has been the case in previous IGCs and in other forums [23,26]. The inclusion of traditional knowledge, however, seemed more widely accepted than previously. Relying on the best available evidence usually points to a precautionary approach, i.e. that lack of full scientific certainty should not be a reason for postponing decision-making where there is risk of irreversible harm (in line with Principle 15 of the 1992 Rio Declaration). It also allows for additional information to be fed into the process as it develops. There is some risk, if this language is not solidified, that it could be altered later on, precluding ABMT/MPA designation. Goalposts like this have been shifted elsewhere in coastal and marine management, for example in the UK's Marine Conservation Zone designation process in 2011, where sites could be identified using "best available" evidence, but more detailed "robust" evidence was required for site designation [5]. It would benefit the BBNJ process to learn from and improve upon state delegates' experiences with MPA network planning. While it is understandable that the negotiators want to harmonize the agreement with existing legislation, pointing to the use of "scientific evidence" under the UN Fish Stocks Agreement is not a proactive, risk-based, precautionary way of addressing the conservation and sustainable use of marine biodiversity beyond national jurisdiction.

Discussion under Article 16 also pointed to the need for a list of indicative criteria which may be included in an annex to the agreement and updated regularly by a Scientific and Technical Body and/or Conference of Parties (discussed below, under Institutional Arrangements).

## 4.2.3. International cooperation and coordination

The discussion on Article 15 focused largely around the need for enhancing coordination with existing instruments and preventing the undermining of existing measures by other organizations (e.g., RFMOs), while also addressing the concerns of adjacent coastal states. The adjacency issue has been paramount throughout these discussions, as states are concerned about how much of a voice they will have with regard to ABMTs/MPAs established adjacent to their maritime territories [23,6], and whether such ABMTs/MPAs would affect the prospects for private industries within their national jurisdiction. There are also implications for island nations with volcanic activity, which could result in their gaining additional territory [8], as well as for states seeking extended

continental shelf jurisdiction. It is possible that ABNJ today could fall within national jurisdiction in the future, raising questions for ABMT longevity and legal status. A proposal was discussed to include text that would allow a coastal state's sovereign rights over the seabed and subsoil under UNCLOS to be given due regard in cases where ABMT/MPA measures affect superjacent waters. In general, the topic of adjacency is controversial because it implies that coastal states have more rights in the ABNJ compared to land-locked or more distant states.

## 4.2.4. Decision-making

There is also continued disagreement over how ABMTs/MPAs will be designated, i.e., whether by a COP or by relevant global or regional/ subregional or sectoral bodies [12]. On one hand, regional processes can be especially efficient in terms of target development, implementation, adaptation, followup and review [5,31]. On the other hand, the existence of multiple competent sectoral organizations suggests the need for a "cooperative initiator" to coordinate, resolve conflicts, and encourage action by existing bodies [34]. Two options were floated at IGC-4. Some states preferred ceding authority to the COP to be the primary decision-making body. The second option was more of a partnership between the COP and other instruments/bodies, where the COP would identify potential ABMTs/MPAs and make recommendations, while allowing other existing instruments' authority for establishing them. This remains a complex and unresolved institutional arrangement issue, and there are some concerns about not wanting to create a hierarchy of global authority over regional authorities. Another concern is that if the COP establishes MPAs without the authority to enact concrete protection measures, the result would be the creation of 'paper parks' [38]. It is important for the COP to work with existing instruments but also help those needing additional support.

One general concern with the efficacy of the draft treaty is the lack of a specific mandate for states to actually use the ABMT/MPA process to establish new protected areas [12]. In existing MPA processes, parochial and status quo extractive interests - as opposed to the interests of future generations - tend to drive decision-making about the establishment of MPAs [26]. And although the BBNJ agreement offers an important opportunity to legalize a global ABMT/MPA process, the heightened level of obligation this represents for states makes the process "much more politically sensitive" than declarations of commitment associated with, for example, CBD targets [3] . One example of how this might impact the final treaty design is a proposal by Japan (in a publicly available text submission) that the BBNJ agreement should allow for an opt-out mechanism by which states adversely affected by a proposed ABMT/MPA could choose not to accept associated restrictions. Although this proposal met strong resistance from many delegates, it demonstrates how compromises to ensure consensus can weaken the overall impact of a new BBNJ designation process. Overall, the final institutional arrangements that help to animate and actualize ABMT/MPA process will be shaped by larger attitudes about international politics in general and the BBNJ package as a whole [12].

## 4.3. Environmental impact assessments

"Our work has been extremely successful and that's why we have the longest text in the document. Now we have to sort out our differences."

- Facilitator Rene Lefebvre, at the beginning of the EIA workstream. It became clear at IGC-4 that while there was much done on the topic of Environmental Impact Assessments (EIAs), controversy remained on the best way to proceed. Various models were held up as potential blueprints for the BBNJ EIA guidelines, most notably Article 206 of UNCLOS. There were also vociferous discussions about when the need for an EIA would be triggered, with some favoring a single trigger that would result in an EIA becoming necessary, with others favoring a tiered approach that would take into account the needs of particularly

vulnerable areas. Unlike other issue areas where ideological disagreements dominate the discussion and divide states, the topic of EIAs is characterized by three main themes: how and how much to rely on existing mechanisms, who will be assigned what decision-making authorities, and whether there should be special rights for adjacent states and/or special procedures for vulnerable areas. Although the EIA issue area does not tap into major ideological divisions that shape, for example, the MGRs discussion, it does involve fundamental questions about what it means to be an 'implementing agreement' of UNCLOS.

## 4.3.1. Triggers and standards

In terms of the design and implementation of the BBNJ agreement, the first major question is when and how an EIA should be conducted. Each of these points were the subject of heated debate at IGC-4. The first, when an EIA should occur, generally featured a discussion on potential "triggers" for an EIA; that is, what criteria should be used to determine whether or when an EIA was necessary. Most delegates agreed that the trigger, if anything, should be the level of potential impact and not the type of activity. Because of the "should not undermine" proviso in the mandate of the negotiations, it is generally understood that activities with pre-existing governance regimes, such as fishing and seabed mining in the Area, would not be subject to new EIA processes [17,2]. Among the countries that were interested in establishing an objective trigger for EIAs, the question revolved around what that trigger should look like and whether there should be only one trigger or if a tiered approach of some kind was needed to account for special circumstances. Some of those who favored a single trigger pointed to UNCLOS Article 206 as a guideline. This article reads:

When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results of such assessments in the manner provided in article 205.

This threshold of "substantial pollution" or "significant and harmful changes" does include subjective terms, specifically the adjectives "substantial" and "significant." But it has the virtue of already being agreed to by most of the states participating in the BBNJ negotiations. Some states, however, argued that this standard is too low and does not reflect more modern approaches to environmental protection. These states often point to an alternative in the Antarctic Treaty System's Madrid Protocol, which offers both a stricter standard and a tiered approach to the trigger for EIAs.

ARTICLE 8.

## ENVIRONMENTAL IMPACT ASSESSMENT.

- 1. Proposed activities referred to in paragraph 2 below shall be subject to the procedures set out in Annex I for prior assessment of the impacts of those activities on the Antarctic environment or on dependent or associated ecosystems according to whether those activities are identified as having:
  - (a) less than a minor or transitory impact;.
  - (b) a minor or transitory impact; or.
  - (c) more than a minor or transitory impact.

The countries arguing for a single trigger suggest that EIAs are only needed when major impacts were expected, an approach justified by the desire to avoid unnecessary delays in proposed activities as well as a fear of overwhelming any bureaucratic process set up to handle the EIAs. Those who advocate for the tiered approach argued that activities likely to have a "minor or transitory impact" would be subject only to a screening, and those with "more than a minor or transitory impact" should be subject to a full EIA. These parties believed such an approach to be a valid compromise for all parties, as one could avoid bureaucratic backlogs, but also improve environmental protection. There was also debate over whether particularly vulnerable areas needed extra EIA guidelines, or whether these areas should be considered on a case by case basis. Altogether, an EIA process with two stages, two different thresholds, and special consideration for certain areas would be

significantly more complicated to implement compared to a statedetermined process that relies on the existing UNCLOS threshold.

## 4.3.2. Role of the scientific and technical body

This led into a discussion about the Scientific-Technical Body (STB), and what its role would be with regard to EIAs. Some delegates indicated a preference for the STB to define relevant triggers and standards for EIAs; others strongly preferred a state-based approach. There were also a number of moderate positions that would assign the STB a limited advisory function regarding either/both definitions and determinations of EIAs. There is general agreement among participating delegates that an STB serves a role in providing guidance for EIAs, but several delegates feared that any role beyond recommendations would undermine existing regional bodies and instruments. These arguments were forwarded by developed states such as the EU, Japan, and the US in the explanations attached to their written proposals. Opposition to assigning a decision-making function to an STB on EIAs stemmed from a wariness that the body might affect the commercial prospects of a given state or private actor. On the other hand, several developing states were open to a more decisive role for the STB, if it included regional representation.

Those who opposed STB decision-making sometimes proposed assigning such functions to the COP, to avoid the 'lowest common denominator' effect of allowing states to make all EIA decisions. Several different approaches were proposed by delegates, some of which are compatible with the idea of the STB retaining a degree of authority. Some delegates were comfortable with STB decisions, advised by the COP, while others preferred the other way around: COP decisions with STB advice. Others emphasized that COP guidance should support stateled decision-making on EIAs. All of these dividing lines pre-date IGC-4 [16,17][8], yet there was a general lack of progress as delegates failed to get any closer to a broadly accepted solution for EIA triggers or the role of the STB.

## 4.3.3. Monitoring and review

There was general agreement that the BBNJ agreement should include some provision for monitoring and review of EIA processes, especially because the processes may vary in quality and thoroughness depending on the will and capacity of implementing states. Some delegates preferred an approach where monitoring and review would be conducted multilaterally through the COP or STB but also potentially by a relevant regional body. Under these proposals, states would submit reports detailing their EIA processes for review by the designated international or regional body. A CARICOM and PSIDS joint proposal, for example, would have the STB review EIA reports submitted by states. Others preferred to keep monitoring and review as a state-led process, using UNCLOS provisions as a justification. The United States, for example, proposed the deletion of Article 37 in a publicly-available text submission, explaining that "we cannot support any oversight or review of final reports by any international body."

## 4.4. Capacity building and transfer of marine technology

"I live in hopes that some of you will surprise me, but I suspect we're going to canvas the same arguments and traverse the same grounds again".

- President Rena Lee on "shall promote" vs "shall ensure".

There is general agreement that capacity building and the transfer of marine technology (CBTMT) is an important aspect of the BBNJ agreement, and a key enabler for developing countries to fulfill their obligations under the agreement [6,35,39]. As such, the issue of CBTMT is not only important to strengthen the resilience and security of vulnerable states, but support their activities in terms of the planning, evaluation, implementation, and follow-up of other areas of the BBNJ package [15, 16]). For these reasons, the developing states have been able to credibly argue that strong CBTMT provisions are critical to an effective treaty.

#### 4.4.1. Mandatory versus voluntary

CBTMT has been the most stagnant area of negotiations, in that there has been very little movement towards consensus since IGC-1 [14,15]. To exemplify this, at the beginning of the second week of IGC-4, while discussing CBTMT, the facilitator held up a homemade jellyfish toy that was hanging on her microphone, keeping an eye on it as she said "these little hand made marine critters have been around during all of the meetings the last four years. The same goes for the discussions around whether or not CBTMT should be monetary vs. non-monetary and mandatory vs. voluntary" [6,13,15,23,28,39]. This lack of progress can be explained by the nature of the basic disagreement. In general, developing state coalitions, especially those made up of states that are very vulnerable to ocean-based disruptions, insist that CBTMT must be mandatory and include monetary components. Developed countries, on the other hand, continue to insist that voluntary and non-monetary contributions are sufficient. They emphasize that the BBNJ agreement and any institutional arrangements should primarily serve a coordinating role to connect the "haves" and "have nots" and thereby facilitate transfers of technology and capacity [13,15]. There is very little room for compromise between these positions, and there is a general understanding that the voluntary language contained in UNCLOS has not generated sufficient CBTMT to achieve the goals of the BBNJ (and many delegations dispute that UNCLOS prompted any transfers at all). One delegate made the tongue-in-cheek suggestion that the language of "guaranteed voluntary" might bridge the divide.

During IGC-4, some states still sought a kind of compromise by suggesting that capacity building (CB) and transfer of marine technology (TMT) be differentiated in terms of the level of obligation or "mandatory-ness" of any transfer. How such a separation would work in practice was not discussed, despite the fact that it might be difficult to distinguish technology and capacity. Instead, delegates indicated that there was a need to discuss such a separation at future negotiations or at the COP. This consideration was paired with discussion on the development of a list of broad categories of types of capacity and technology to add to the treaty text, or as an Annex to avoid complications with amending the treaty text once signed (because an Annex could be more easily updated by the COP). The idea of having different levels of obligation for CB and TMT was incorporated into the revised draft text issued two months after IGC-4, which included language that States Parties "shall ensure access" to CB but "actively promote" TMT. This emerging distinction suggests a stronger concern about intellectual property rights compared to a general transfer of resources, with the latter being more acceptable to developed states.

## 4.4.2. Monitoring and review

There was also general agreement on the need for monitoring and review of CBTMT as a kind of accountability mechanism for all members, and that this role was for the COP or a subsidiary body thereof, though some suggested leaving this role to international institutions. For example, CARICOM suggested (in a publicly-available text proposal and explanation) that there should be established a CBTMT committee with a role in not only assessing if capacity gaps are decreasing, but also actively making recommendations to states. In the strongest proposed versions, states would have to submit mandatory reports on CBTMT, both as donors and recipients. Proponents of this approach insisted that such reporting could, and should, be part of a streamlined, non-onerous system. Overall, developed states still wished for less detail, indicating a fear that the scope and reach of monitoring indicators would be difficult to define, whereas developing states wished for more detailed and mandatory review mechanisms to ensure that donor states had some accountability for CBTMTs.

The need to define "capacity building" and "transfer of marine technology," and to distinguish them from one another, is connected to monitoring and review functions. Broad or vague definitions may facilitate weaker commitments, and lead to imprecise monitoring regulations. One could argue that a weak section on CBTMT could be more

likely to be effective from a legal perspective, as fewer obligations and mandatory elements could be found acceptable by a larger number of states – a paper tiger as discussed in Tiller et al. [28]. In contrast, CBTMT provisions with guaranteed and specific contributions would be well suited to ensure CBTMT on paper, but require substantial monitoring for compliance, and therefore be less likely to achieve consensus.

As such, the statement by President Lee that "we're going to canvas the same arguments and traverse the same grounds" rang true. The dividing lines that have existed since IGC-3 on whether the CBTMT shall be a voluntary or mandatory mechanism still divided delegates at IGC-4 [6,8,13,15,39]. These sentiments were first brought up at IGC-1, where Nauru, on behalf of the PSIDS, emphasized that "...voluntary funding alone will not suffice", mirroring the Federated States of Micronesia's statement that "there must be some kind of money or nothing is going to happen" [35]. The arguments during IGC-4 unfortunately still canvased the same issues, with the main dichotomy being between developed and developing countries and the tools for closing the existing scientific and technological gap.

## 5. Institutional arrangements

Both the ideas that "form follows function" and "function follows form" are evident in discussions of what institutional arrangements will be created by the BBNJ agreement to implement and actualize its provisions. In addition to the structural question about the right level of decision-making or locus of cooperation (global, hybrid, or regional), the discussion of so-called "cross cutting" issues also concerns how the BBNJ agreement will legally relate to existing instruments, including UNCLOS and the CBD [4]. It is difficult to get a sense of where consensus will fall in terms of new institutional mechanisms, because many states are unwilling to commit to, or even discuss in detail, institutional forms until substantive issues are resolved. But institutional arrangements have been discussed throughout the IGCs, a reflection of their centrality for the implementation and effectiveness of the BBNJ agreement. Another reason for prioritizing the discussion on institutional arrangements, as stated by Iceland at IGC-2, is that "function follows form" in many areas ([23], 6). In other words, states cannot figure out what it is possible for different sections of the treaty to accomplish, until they have a sense of what structure and authority of institution the international community of states is willing to agree to. At the very least, the wide divergence of preferences and tolerances regarding institutional arrangements creates a need for extended consensus-building to finalize the treaty architecture.

## 5.1. Creation of new bodies

Although there is near-consensus that the agreement will create four bodies - a Secretariat, a Conference of Parties (COP), a Scientific and Technical Body (STB), and a clearinghouse mechanism – the assignment and distribution of functions between them is still the subject of debate. Basic disagreements about the appropriate degree of autonomy and authority for new BBNJ institutions persist, and are reflected in specific statements about the proposed bodies. Developing country coalitions, especially those with concerns about capacity and access, were more likely to favor a well-articulated governance structure, including subsidiary bodies of the COP, that would take on substantive decisionmaking functions. These included proposals for a CBTMT committee and an Implementation and Compliance committee (PSIDS/CLAM). Some states expressed comfort with the COP creating other subsidiary bodies in the future. Developing countries also tend to be more in favor of expanding STB functions beyond just making recommendations to the COP and providing assistance to state parties. In contrast, states who have tended to favor a regional approach to BBNJ implementation, especially those with substantial investment in RFMOs or experience with Regional Seas Organizations, argued against the delegation of authority to any new global institutions.

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The importance of a COP was universally acknowledged, and delegations agreed that the COP would decide its own rules of procedure at its first meeting. Delegates disagreed about whether the COP should make decisions by consensus, as a general rule, and resort to its rules of procedure if all efforts have been exhausted. While some preferred consensus only, the majority of delegates preferred consensus as a general rule and first effort. Among the latter group, individual delegations suggested different voting rules for substantive and procedural decisions. Others suggested different rules for decisions about ABMTs, although this assumes that the COP would have the authority to make decisions to designate them. Finally, a small number of states suggested the creation of opt out or objection procedures, referring to RFMOs with similar mechanisms. Although there were concerns about the impact of such procedures on overall effectiveness, proponents argued that such procedures would be rarely used, would require a formal process, and would make it significantly more likely that states would be willing to ratify the BBNJ agreement.

Almost all delegations agreed that the other three proposed bodies (STB, Secretariat, and clearinghouse) should be constituted, but there is no clarity on exactly who they will be. This question was most thoroughly addressed for the Secretariat, which will at least be assigned administrative tasks related to the BBNJ treaty implementation. The center of this debate focused on whether the UN Division on Ocean Affairs and the Law of the Sea (DOALOS) could or should take on the task, or whether an entirely new organization should be created. It was considered unlikely that another organization would be capable of, or interested in, serving as the BBNJ Secretariat. While some expressed a desire for coherence and unity in the ocean governance regime that would come with DOALOS as Secretariat, others were concerned about over-burdening DOALOS and the difficulty of securing a guaranteed funding mechanism (one that did not go through the UN General Assembly budget process). This level of detail was not discussed with regard to the constitution of the STB or clearinghouse, although the International Council for the Exploration of the Sea (ICES) was occasionally mentioned as a possible model or resource. Two interesting discussions concerned the desire to see "technological" added to the STB title and mission, and questions about whether a web-based clearinghouse would be future proofed given how quickly technology can change.

## 5.2. Relationship to UNCLOS

The BBNJ agreement will be the third implementing agreement to UNCLOS, and thus is supposed to be "fully consistent" with it [36]. The point of implementing agreements, however, is to fill in the gaps or resolve issues with the original Convention. And the BBNJ negotiations are not taking place at a meeting of the states parties to UNCLOS; they involve non-members who intend to participate in the BBNJ agreement without ratifying UNCLOS. Indeed, there seems to be consensus that non-parties to UNCLOS should be able to ratify and participate in the BBNJ agreement. Frequent references to the UN Fish Stocks Agreement, which operates as an independent treaty, reaffirm this intention. These factors, and the 40 years since UNCLOS was finalized, create a tension between consistency with UNCLOS and the need and desire to create something that goes beyond and improved upon it. Without maintaining a close connection between the BBNJ and UNCLOS (including co-extensive membership), which would enhance the integrity and legitimacy of both, the new agreement is unlikely to have binding force on non-parties as soft law or custom [21]. This makes the question of future ratifications critical to the success of the future agreement, putting pressure on delegations who would prefer a stronger agreement that may reduce the number of formal parties.

## 5.3. Dispute settlement

Dispute settlement is likely to be a crucial aspect of BBNJ

implementation, as the scientific and technical nature of many of its 'moving parts' makes disputes likely [20]. UNCLOS Part XV lays out a complex, well-developed, flexible, and compulsory system of dispute settlement. Many delegations wanted to import the system wholesale into the BBNJ agreement mutatis mutandis, in order to maintain the integrity of the UNCLOS system and utilize a familiar and agreed upon system. But this is far from guaranteed, as there have been at least six other types of dispute settlement systems proposed during the PrepCom and early IGCs phases alone [32]. Many delegates noted the need to tailor the dispute settlement to the BBNJ context, including making the dispute settlement system accessible to non-UNCLOS parties. This might require eliminating some portions of the UNCLOS Part XV system that non-parties find objectionable. One non-UNCLOS member even suggested that dispute settlement should only include negotiations and mediation, in line with the Article 33 of the UN Charter. In contrast, other states, including both developed and developing, spoke favorably about expanding reliance on the International Tribunal on the Law of the Sea (ITLOS), including the use of a special chamber for BBNJ disputes. Other suggestions for tailoring to the BBNJ context included fleshing out the system to include dispute prevention or resolution mechanisms, such as the proposed Compliance and Implementation Committee. A joint proposal by Singapore, Colombia, El Salvador, and the Philippines would create an ad hoc expert panel to help resolve technical disputes.

A number of maritime states expressed opposition to the expansion of the dispute settlement system, preferring to restrict the situations where international tribunals could influence the interpretation and application of the BBNJ agreement. Many states agreed that the rulings of international tribunals such as ITLOS should be circumscribed to legal issues only (as opposed to scientific and technical disputes). Some emphasized the principle of state consent to binding dispute settlement, pushing back on the idea of compulsory mechanisms without sufficient flexibility and exceptions. China, for example, submitted a publiclyavailable proposal where states would have to give "explicit consent on a case by case basis" in order for dispute to be resolved via "judicial settlement, arbitration, mediation, conciliation or any other third-party dispute settlement mechanism." Even the idea that the COP could request advisory opinions from ITLOS or another designated tribunal was controversial. A publicly-available PSIDS proposal that the COP and "any subsidiary body thereof" be able to request advisory opinions on interpreting the BBNJ agreement was not widely embraced. Although advisory opinions are not binding, it appears that some states are concerned about the potential of an over-active COP pushing the BBNJ agreement in directions they would not be comfortable with.

## 6. The beginning of the end?

An undeniable optimism suffused the negotiations at IGC-4, but there is still a great distance to go before the treaty design is finalized, and even farther for entry into force and implementation. Diplomats, and the states they represent, must strike a balance between designing a treaty that is politically palatable (and therefore could be ratified) for a sufficient number of states, and one that can actually function to achieve the goals of conservation and sustainable use of marine biodiversity in ABNJ. In international negotiations, and especially those concerning global-scale environmental issues, there is always a risk of 'lowest common denominator' dynamics that 'water down' treaties to a level of weakness that can be accepted by a large enough number of states. Maintaining high standards, and a strong treaty design that actually shapes the behavior of states and the private actors under their jurisdiction, will require a significant degree of political will by the maritime, coastal, island, and other states negotiating the BBNJ agreement. Unfortunately, a marked lack of political will can be seen in the continued reluctance of states to build robust new institutions or create hierarchical relationships with existing ones. As one developed maritime state remarked, "it's all us," so there is no legal or theoretical reason that states consenting to be bound by the BBNJ agreement could not meet those binding obligations through their participation in other international organizations. But, as noted by Oude Elferink and Kerr, the BBNJ process was "never intended to fundamentally remap legal ocean space," but rather reaffirms current trajectories in ocean governance [27].

Even a weaker and more circumscribed BBNJ agreement will take more time. At IGC-3, many delegations seemed to be in denial about the status of the draft text, and spoke about the impending culmination of the negotiations and finalization of a BBNJ agreement [18]. However, the progress (or lack thereof) made at IGC-4 made it abundantly clear that more time is needed to finesse the text, which will require creative compromises among coalitions and delegations, as well as important decisions about how to make BBNJ rules practical and feasible. As the above sections illustrate, a large number of definitional, technical, and practical obstacles still need to be resolved. Each of the four issue areas have open questions on key issues, such as decision-making, mandatory requirements, and the relationship between state and private actors. In the MGRs issue area in particular, "a dense fog remains" on definitions and IPR. IGC-5 has been scheduled for August 2022 and two revised drafts of the treaty were released to delegates, in May and then July 2022.

### CRediT authorship contribution statement

Elizabeth Mendenhal: Conceptualization, Methodology, Investigation, Data curation, Writing – original draft preparation, Writing – review & editing. Elizabeth De Santo: Writing – original draft preparation. Mathias Jankila: Methodology, Investigation, Data curation, Writing – original draft preparation. Elizabeth Nyman: Writing – original draft preparation. Rachel Tiller: Methodology, Investigation, Data curation, Writing – original draft preparation.

## **Data Availability**

The authors do not have permission to share data.

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