

## ARTICLE OPEN



# The influence of Antarctic governance on marine protected areas in the Biodiversity Beyond National Jurisdiction Agreement negotiations

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With the Biodiversity Beyond National Jurisdiction (BBNJ) Agreement adopted, the negotiations process left questions related to what would be included in the final text and how the BBNJ Agreement architecture would function. The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), an international body, has successfully established high seas marine protected areas (MPAs), a key aspect of the BBNJ Agreement. Here, we investigate if and how CCAMLR has influenced negotiations on the BBNJ Agreement and how it may influence the forthcoming structure. This work used ethnographic notes and documents from the negotiations and interviews with actors who overlapped at both the BBNJ negotiations and the CCAMLR meetings to elucidate themes of influence that CCAMLR has had on the BBNJ negotiations. We found that CCAMLR is influencing the BBNJ negotiations in several ways, including through setting precedent and as an example for lessons learned. Additionally, we found that there was a divergence of views on whether CCAMLR would be considered a competent body by the decision-making mechanism of the BBNJ Agreement to establish MPAs due to the issues CCAMLR faces on reaching consensus. We found that some aspects of CCAMLR, such as the exclusivity (i.e., restricted to only actors working within the CCAMLR space) was perceived negatively by interviewees, thus affecting the BBNJ Agreement negotiations through hidden red lines. With the BBNJ Agreement adopted, there is still the potential for CCAMLR to be an example for the BBNJ structure and to be a participant in the BBNJ Agreement architecture.

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## INTRODUCTION

Areas beyond national jurisdiction (ABNJ)—which are made up of both the water column and the seabed—represent 64% of the surface and nearly 95% of the volume of the global ocean<sup>1</sup>. The governance for ABNJ falls under the United Nations Convention on the Law of the Sea (UNCLOS), which outlines the spatial boundaries of the global ocean and provides a framework for the use of ABNJ<sup>2</sup>. UNCLOS defines the high seas as starting at 200 nm from a coastline, and the Area as the seabed, ocean floor, and subsoil starting beyond the legal continental shelf (Coastal States may apply to the Commission on the Limits of the Continental Shelf to extend their rights to the continental shelf beyond 200 nm) of coastal States.

Most extractive resources within ABNJ (e.g., fish, minerals) comprise common pool resources as there is a high cost to exclude users (i.e., through monitoring and enforcement), and there is high subtractability (i.e., one person's use of the resource results in less of that resource for other people) of the resource units (i.e., fish populations)<sup>3,4</sup>. There is a general consensus that fisheries management in the high seas has failed to conserve populations<sup>5–7</sup>. This is partially due to ABNJ posing a distinctive challenge for governance regimes. The high seas pose a common pool resource dilemma, in that there is increasing demand for natural resources, incomplete regulations and governance, and the potential for mismatch in institutional arrangements<sup>8</sup>. The coupled human-nature dynamic of the high seas requires a balance between human use and the conservation of the marine ecosystem and biodiversity<sup>9,10</sup>.

Due to the growing threats to the marine environment in ABNJ, Nation States at the United Nations (UN) initiated the process of investigating whether a new treaty dedicated to conserving the high seas was warranted. An informal working group tasked by the UN General Assembly (UNGA) to study issues related to ABNJ officially convened three times between 2006 and 2010 and concluded there were governance and regulatory gaps in the regulations within UNCLOS that warranted the addition of an implementing agreement under UNCLOS<sup>11</sup>. Some of the gaps that were identified included: a lack of organizations with a mandate for promoting conservation and sustainable use of biodiversity in ABNJ; a lack of a global instrument that encapsulates principles such as ecosystem-based management and the precautionary principle; and a lack of a sufficient legal mandate for biodiversity conservation, cooperation, and coordination in sectoral bodies within ABNJ<sup>11</sup>.

In 2011, the informal working group met a final time to adopt a “package” of recommendations that aimed to fill the identified regulatory and governance gaps within UNCLOS<sup>12</sup>. The package focused on four distinct focal points to fill these gaps: (1) marine genetic resources, including questions on the sharing of benefits; (2) measures such as area-based management tools (ABMTs), including marine protected areas (MPAs); (3) environmental impact assessments; and (4) capacity-building and the transfer of marine technology<sup>13</sup>. Based on the informal working group's recommendations, the UNGA passed a new resolution which initiated the process of creating a new legally binding instrument under UNCLOS<sup>14</sup>. The overarching goal of this instrument would be to promote the “conservation and sustainable use of the

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marine biological diversity of areas beyond national jurisdiction"<sup>14</sup>. This implementing agreement would be housed under UNCLOS, so that it would be in accordance with existing agreements or bodies<sup>10,15</sup>. After a series of preparatory committee meetings, the UNGA agreed to convene four intergovernmental conferences (IGCs) to draft treaty text. The fourth and final meeting was meant to be held in March 2020 but was put on hiatus due to the Covid-19 pandemic<sup>16</sup>. The fourth meeting did eventually occur and was held in a hybrid format in March 2022. Approval for a fifth meeting was granted by the UNGA, with the fifth meeting held in August 2022. The fifth meeting was suspended after the allotted 10 days of meetings resulted in no treaty to vote on. The fifth meeting was scheduled to continue in February 2023, and ended with Nation States of the UN reaching an agreed upon text of the BBNJ Agreement<sup>17</sup>.

The BBNJ Agreement is expected to create a structure that includes: a Secretariat; a Conference of Parties (COP) that will be the primary decision-making body; and a Scientific and Technical Body (STB) that will operate in a variety of functions across the package, such as reviewing proposals for area-based management tools (ABMTs), including MPAs<sup>13,17</sup>.

MPAs are a type of ABMT. While both afford a specified area of the marine environment some form of protections, MPAs are meant to specifically achieve objectives related to long-term biodiversity conservation, and may allow objectives related to sustainable use so long as they do not interfere with the primary conservation objectives<sup>17</sup>. Conversely, ABMTs are managed with the goal of achieving particular conservation and sustainable use objectives<sup>17</sup>. MPAs have been shown to provide a variety of biological, ecological, and sociocultural benefits, such as restoring biodiversity and increasing ecological resiliency and connectivity<sup>18–20</sup>.

There are several MPAs currently in ABNJ, though the management structure required to create effective MPAs in ABNJ is currently fragmented<sup>21</sup>. The existing high seas MPAs, located in the North East Atlantic and the Southern Ocean, either rely on State Parties bound to collective agreements (such as the OSPAR network of MPAs, established by the OSPAR Commission that includes areas in both Exclusive Economic Zones (EEZs) and ABNJ) or through decision-making by Nation States belonging to an international framework or body (IFB) (such as the South Orkney Islands Southern Shelf MPA or the Ross Sea region MPA designated by Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR))<sup>22,23</sup>. Here we focus on CCAMLR, the arm of the Antarctic Treaty System which manages marine living resources in the Southern Ocean. Article II of the Convention on the Conservation of Antarctic Marine Living Resources (CAMLRL Convention) mandates conservation, but allows rational use, where fishing is permitted but under a strict, precautionary, ecosystem-based approach<sup>24</sup>. Under the Convention, Article IX allows for adopting and implementing closed areas for science or conservation, providing a legal basis for MPAs<sup>24</sup>. The rules of the CAMLR Convention, including the designation and management of MPAs, are carried forward by CCAMLR, which currently has 26 Member States plus the European Union. Decisions are codified as Conservation Measures (CM), which are legally binding on all CCAMLR Member States. All decisions are made based on consensus during annual CCAMLR meetings.

The first MPA established by CCAMLR was the South Orkney Islands Southern Shelf (SOISS) MPA in 2009<sup>25</sup>. SOISS MPA was adopted relatively quickly by CCAMLR Member States (during the course of one meeting) perhaps because it did not interfere with current fisheries, and came into existence before CCAMLR's CM 91-04 (adopted in 2011) which outlines requirements for establishing MPAs<sup>26,27</sup>. The Ross Sea region MPA was established in 2016 after 5 years of intensive negotiations. As a result, several compromises were made throughout the process to achieve consensus, such as requiring the Ross Sea region MPA to

be a time-bound MPA, in that it will expire in 35 years unless there is a consensus agreement by CCAMLR Member States to keep it in place<sup>28,29</sup>. While not all of the CCAMLR Member States are party to UNCLOS, all Member States of the UN are allowed to participate in the BBNJ Agreement negotiations without prejudice to their ratification of UNCLOS. The vast majority of CCAMLR Member States have also been active in the BBNJ Agreement negotiations.

As CCAMLR is an established and competent IFB that has successfully implemented and manages MPAs, we aimed to investigate how, if at all, CCAMLR has been influencing the ongoing BBNJ Agreement negotiations, with a primary focus on the BBNJ Agreement portion on ABMTs, including MPAs. CCAMLR, as an IFB, also has architecture in place that the BBNJ Agreement structure could mimic, such as a decision-making center, a scientific body, and a financial mechanism. We used a mixed methods approach, including interviews, observations, and meeting reports to reveal the ways in which CCAMLR has influenced BBNJ and what this might mean both for CCAMLR and for the implementation of the BBNJ Agreement.

## RESULTS AND DISCUSSION

### Themes

Three primary themes came out of the semi-structured interviews on the role of CCAMLR in the BBNJ negotiations on ABMTs. The first theme is the influence of CCAMLR, which includes categories of precedent setting and lesson learning [Table 1]. Precedent setting includes codes to track references of consensus, references to time-bound MPAs and the competency of CCAMLR as an IFB [Table 1]. Lesson learning includes the codes of organizational (referring to the organization structure of CCAMLR) and governance (referring to the governance structure of CCAMLR) [Table 1]. The second theme is the exclusivity of CCAMLR, which includes the codes of insider knowledge and relationships among delegations [See Table 1 for definitions and examples of themes, categories and codes].

### Precedent setting

For this work, we define precedent setting as CCAMLR's decisions, definitions, or criteria related to ABMTs that might influence or set norms through CCAMLR's previous actions in the BBNJ Agreement negotiations. As further evidenced through the ethnographic notes and document analysis, CCAMLR was primarily referenced by delegations in BBNJ regarding the precedent CCAMLR has set related to the time-bound nature of MPAs (e.g., with the Ross Sea region MPA) and through CCAMLR's consensus decision-making, as well as CCAMLR's competency as an IFB in relation to the BBNJ Agreement.

There is divergence between how different organizations define what is (and is not) an MPA, especially in relation to whether an MPA can or should have a duration. For example, the International Union for the Conservation of Nature (IUCN) defines an MPA as: "a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values"<sup>30</sup>. The reference to "long-term" in the definition is often thought to allude to the idea that an MPA should exist in perpetuity, though others refer to long-term as existing longer than 10 years<sup>18,31,32</sup>. After much negotiation as to whether the definition of an MPA should include reference to duration, the BBNJ Agreement defines an MPA as: "a geographically defined marine area that is designated and managed to achieve specific long-term biological diversity conservation objectives and may allow, where appropriate, sustainable use provided it is consistent with the conservation objectives"<sup>17</sup>. Duration is not prescriptive. While the IUCN asserts that MPAs with

**Table 1.** Codebook of themes, categories (where applicable), codes and examples of the codes from the interviews, ethnographic notes and additional documents.

Theme	Category	Codes	Definition	Example
Influence of CCAMLR	Precedent setting		The effect of CCAMLR on the BBNJ Agreement negotiations	
		Time-bound MPAs	MPAs that will not exist in perpetuity, but rather for an agreed period of designation	"In regard to the proposed area the Ross Sea [MPA] proposed under CCAMLR, it has set out a precedent of a duration."
		Consensus	All parties participating in decision-making agree to a decision	"CCAMLR established the largest MPA ever by consensus which demonstrates [that] careful consideration towards consensus is possible."
		CCAMLR competency	The ability for CCAMLR to fulfill its mandates successfully and efficiently within their outlined jurisdiction	"The concern would be that the fully entered into force and implemented BBNJ agreement could, if you know [the CCAMLR MPA] proposals [that] get stalled at CCAMLR could take on another life within BBNJ as an MPA proposal themselves."
	Lesson learning		Experiences from CCAMLR that are referred to in the BBNJ Agreement negotiations	
		Organizational	Relating to the architecture of the decision-making center; such as financial mechanisms, decision-making mechanisms, and review by a scientific committee	"I think [decision-making] will be much more difficult in the BBNJ scope, and think of restrictions of time, the entire world and the experts on these issues can't sit in New York or be in one area for the entire lives, they can do it only for a matter of weeks."
	Governance	Relating to specific conservation measures of CCAMLR, which are the legally binding measures that decisions are codified within	"I remember one time, when head of delegation for [country redacted] in CCAMLR [was] also head of delegation for BBNJ, said something [like] 'why don't we just do CCAMLR 91- 04, and we just do MPAs like this?'"	
Exclusivity of CCAMLR			Restricted to only actors working within the CCAMLR space	
		Insider knowledge	Non-public information and context that only those involved in the process would know	"Where I think [knowledge about CCAMLR] has been very impactful is that there have been hidden red lines (e.g., related to sovereignty) by some delegations that directly relate to [the Antarctic]."
		Relationship among delegations	The way in which delegations regard, react, and behave towards each other	"You form this weird allegiance with the other people you're sitting with."

sunset clauses (i.e., are time-bound) are temporary measures rather than an MPA, others assert that "long-term" for an MPA may be a variety of durations<sup>33,34</sup>. For example, Edgar et al.<sup>18</sup> states that MPAs are considered "old" when they have been in existence for 10 years or longer, while Claudet et al.,<sup>35</sup> found that duration of the MPA matters less than the size and location of the MPA. Thus, the 35-year duration of the Ross Sea region, coupled with its location and objectives, likely qualifies it as an MPA<sup>32,36</sup>.

One thing to note about the BBNJ Agreement negotiations is that IGC-4 and IGC-5 were held under the Chatham House Rule; hence, the following results are presented without identifying the delegations that made the statement during those meetings<sup>37,38</sup>. The use of the Chatham House Rule is not unusual at the international level, as it has been used in other forums, such as workshops, negotiations, and meetings<sup>39–41</sup>.

All but one interviewee noted that CCAMLR had set a precedent for time-bound MPAs in the BBNJ discussion, with one interviewee voicing that CCAMLR has had no influence at all on the BBNJ negotiations. Many of the interviewees viewed these precedents as a negative influence on BBNJ. In interviews, more than half of the references to the time-bound nature of MPAs were portrayed as a negative influence of CCAMLR.

"I remember [a delegation at BBNJ] referred to CCAMLR as being the precedent for [a sunset clause], or the Ross Sea MPA as being a precedent for that, because I remember thinking, oh great, sorry everybody."

– Interviewee 006

The duration of the Ross Sea region MPA is often viewed as a concession that was made to ensure its establishment<sup>28,31</sup> and that CCAMLR MPAs should be established in perpetuity<sup>31</sup>. While other ABMTs, such as seasonal fisheries closures, may have a duration, MPAs that have a duration clause are more controversial as benefits from MPAs may take years to be reaped<sup>18,23,42</sup>. Similarly, the time-bound discussions of ABMTs and MPAs in the BBNJ Agreement negotiations have been debated throughout the IGCs<sup>43,44</sup>. For example, Interviewee 008 expressed that the time-bound nature of MPAs is a positive thing, stating that:

"[I]f you are scientifically serious and realistic enough to accept the changes in nature, both the nature-induced or human-induced changes, you need to have a review provision, you might end up having some end date for

any kind of measure. I keep calling them shelf-life era conservation measures, they have a shelf-life, because things will change.”

Best practices for the establishment and monitoring of MPAs includes that the MPAs exist for a long time, as well as having a review process in order to modify the MPA as needed, such as if the distribution of a species changes<sup>18,45,46</sup>. Interviewee 004 noted that the time-bound nature of the Ross Sea region MPA was a compromise made during the negotiations process, and that original proposals did not include such an element. When reflecting on that compromise, they stated:

“I don’t think everyone who read [a proposal to include time-bound as a criterion in the ABMT section] had to remind themselves that the Ross Sea was still worth it. But that’s certainly like, a moment of like, why did we ever agree to [the duration clause].”

This assertion from Interviewee 004 has been supported by both those present at CCAMLR and by researchers<sup>28,31,47,48</sup>. For example, it has been noted that the time-bound nature of the Ross Sea region MPA had impaired negotiations<sup>31</sup>, though in the end it was required to achieve consensus<sup>29</sup>.

During IGC-1, Earth Negotiations Bulletin (ENB) reported through their *In the Corridors* column that the proposal surrounding time-bound MPAs was brought up during the meeting’s plenary, with one negotiator from an unnamed delegation commenting that there is “one example of a time-bound MPA—the Ross Sea in Antarctica—but it was made clear during [the negotiations for the Ross Sea MPA] that this should not set a precedent for other MPAs<sup>49</sup>. It is clear, however, that the Ross Sea region MPA has set a precedent through its designation of a time-bound, high seas MPA. Both the Ross Sea region MPA and others have set precedent before, in both international and national contexts<sup>36,50,51</sup>. For example, the establishment of the Phoenix Islands Protected Area in Kiribati—once the largest MPA in the world—set a precedent for large-scale MPAs, and for other Pacific Small Island Developing States to establish their own large-scale MPAs<sup>51</sup>. Precedent setting can sometimes be a strategic plan by Nation States, or can be an unintended consequence<sup>52,53</sup>.

ENB reports from IGC-1 stated that both the Russian Federation and China favored time-bound ABMTs, including MPAs<sup>49,54–57</sup>. During IGC-2, the Russian Federation noted that “MPAs are the intrusive form of ABMT, and create the most restrictions for economic activity, so the creation of these systems must always be time-bound<sup>58</sup>. China noted that “protected areas should have a duration [and] whether the goal [of the MPA] should be assessed constantly, [and that] we have precedent for this case.” These two delegations continued to support the time-bound nature of MPAs during IGC-3<sup>59</sup>.

During IGC-5, a delegation stated their view is that an MPA should have a duration because the environment and its features change over time, as evidenced by “the Ross Sea [MPA] proposed by CCAMLR which has set out a precedent of duration<sup>44</sup>. There were several allusions to time-bound MPAs by shared Member States that were made throughout the fifth meeting. When delegations were negotiating the definitions of MPAs, one delegation stated that MPAs are:

“A specific case which is linked to serious limitations and possibly the prohibitions of activities, so the definition [as drafted] lack key elements like time linkages [to show] that the MPA is not established forever and there is the possibility for [the MPA] to be cancelled outright.”

Not all delegations agreed with this viewpoint, with one delegation stating that “MPAs should not be time-bound” and a different delegation suggesting that the definition of an MPA should not include reference to being time-bound “as the length of age of an MPA may depend on the review of the MPA<sup>43</sup>. This was supported by a different delegation who added that “MPAs should not have time limits ... so maybe specify that ABMTs have time limits but MPAs should not and do not<sup>44</sup>.”

“Consensus is a killer.”

- Interviewee 006

Several CCAMLR Member States that were also actively involved in BBNJ negotiations oftentimes referenced CCAMLR’s consensus requirement for establishing MPAs. As one delegation stated during IGC-2, “CCAMLR established the largest MPA ever by consensus, which demonstrates careful consideration towards consensus is possible<sup>58</sup>. This was a sentiment also echoed by a different delegation, who “appreciate[d] [the delegation’s] comment on CCAMLR, as consensus has worked appropriately<sup>58</sup>. Consensus was brought up significantly less at the earlier IGCs, likely in part because the foundational structure of the BBNJ Agreement was still being negotiated. Most interviewees that commented on the consensus requirement of CCAMLR suggested that it had a negative influence on the BBNJ Agreement negotiations. Interviewees mainly commented on (1) the number of participants in CCAMLR vs the BBNJ Agreement and (2) the ability of Member States to act in bad faith to block proposals.

CCAMLR is a smaller, “exclusive club” [see below] of 27 Members. The BBNJ Agreement negotiations have had at least triple that number of Member States participating in the negotiations process. As Interviewee 009 stated:

“I don’t think [consensus] actually makes sense at all ... imagine getting 200 countries to agree. CCAMLR is different ... it doesn’t have that many voting members.”

A similar sentiment was expressed by Interviewee 003, who stated that under a consensus based decision-making scenario “any country [that is party to the BBNJ] Agreement can stop an MPA anywhere, it’s just too much”, as well as Interviewee 006 who stated that that CCAMLR is “struggling to reach consensus on just about everything”. Others expressed that consensus did not make sense from a scientific perspective, with Interviewee 006 stating that the BBNJ COP should “be able to designate MPAs based on some kind of scientific review that’s not super political” such as what consensus would result in. Interviewee 002 spoke about how consensus in CCAMLR was being used by delegations as a way to “kill” decisions based around other scientific perspectives, such as climate change.

Consensus in CCAMLR, and in the Antarctic Treaty System widely, has been the subject of many academic articles<sup>28,48,60,61</sup>. Much of the literature questions the efficacy of consensus, especially when consensus is required for complex decisions, such as establishing MPAs. One issue towards consensus is a lack of collaboration among Member States to find common ground, especially in recent years<sup>60</sup>. Goldsworthy refers to consensus as the “Achilles’ heel” of CCAMLR as a structural weakness—something that should also not be copied for other structures, such as the BBNJ Agreement<sup>60</sup>.

Additionally, the ability for consensus to be reached can be affected by the larger geopolitical realm. For example, the 2014 Russian invasion of Crimea stalled progress on establishing the Ross Sea MPA due to the geopolitical situation<sup>48</sup>. One interviewee (004) brought up how the Russian Federation and Ukraine—two Member States of CCAMLR—are currently at war with each other,

effectively ensuring consensus would not be reached on any matter related to CCAMLR. The report from the 41st CCAMLR meeting in September 2022 show a similar breakdown of Member States' ability to negotiate and achieve consensus in CCAMLR<sup>62</sup>.

Consensus was also spoken about as being affected by the larger geopolitical landscape, not just by the mandate and remit of Antarctic governance. Interviewee (005) brought up how in the case of CCAMLR, consensus is appropriate because "there's a whole lot of sensitivities (such as historic territorial claims) but in the BBNJ context, [their delegation] has been quite strong on not wanting consensus." The outlier interviewee (008), when prompted about consensus in BBNJ negotiations, stated that "[consensus] should be the norm, but it is not."

ENB reported during IGC-1 that China, Uruguay, and the Republic of Korea – all shared Member States between CCAMLR and the BBNJ Agreement negotiations– proposed that the COP make decisions through consensus<sup>63</sup>. ENB reported that Japan also supported that the COP make decisions through a consensus, which they re-expressed directly citing CCAMLR in IGC-2<sup>58,63</sup>. One delegation also cautioned against politicizing the process and suggested a consensus option for decision-making would prevent that<sup>58</sup>.

The Russian Federation also echoed a similar sentiment during IGC-2 as they did during IGC-1, with the delegation stating that they "will only accept decision-making by consensus" for the ABMTs portion of the BBNJ Agreement<sup>58,64</sup>. During IGC-2, China still supported the consensus option, stating that the BBNJ Agreement "should be based on consensus to decide on relevant matters [such as ABMTs, including MPAs]"<sup>58</sup>.

During the IGC-4 meeting, which was held in a hybrid format, a shared delegation between CCAMLR and the BBNJ negotiations stated that they believed that if "consensus may not be reached even after efforts have been exhausted ... [they] will still go for an opt-out provision such as those seen in CCAMLR"<sup>43</sup>. This delegation further elaborated that allowing for the opt-out clause (in Article IX of the CAMLR Convention) will attract broader acceptance of the BBNJ Agreement. During IGC-5 the same delegation reiterated their position, stating that "in order for ABMTs to be accepted ... consensus should be reached [with] an opt-out clause available, similar to ... the CAMLR Convention"<sup>44</sup>. As one delegate shared between CCAMLR and the BBNJ negotiations stated during IGC-4: "to set up protected areas in the high seas, we will need to stick to consensus and will have to have mechanisms around consensus building"<sup>43</sup>. This was challenged by a different delegation, stating that "consensus should be strived for and all efforts to get there, however, [we] don't want to be in situation of blockage, so to avoid this a voting system [should be in place]"<sup>43</sup>.

ENB reported that a regional voting bloc—supported by others—proposed a voting system in the event that consensus could not be reached on ABMTs, but that this was also opposed by several delegations<sup>37</sup>. During IGC-5, the debate around consensus continued, with one delegation stating that the establishing of ABMTs was "one of the important matter[s] to be decided [on]" and because of the importance, "consensus should be required [because] ... high seas are in the global common domain ... and all countries on the high seas have equal rights and obligations, so MPAs on the high seas effect the rights of all countries [and therefore] the consent of all countries should be required"<sup>44</sup>. This delegation reiterated this point throughout the meeting, stating on a different day that the text should include the addition of "by consensus" because the high seas "represent the global common domain and all countries have common and equal interest ... so it is only at the basis of approval of all (e.g., consensus) that MPAs can be implemented"<sup>44</sup>.

Other Member States disagreed on that point. One Member State delegation stated that the COP decision-making should be that "consensus is a general rule, but a plan in case that shouldn't

occur, such as a qualified majority" should be in place<sup>44</sup>. A different delegation that is also shared between CCAMLR and the BBNJ Agreement negotiations responded positively to that delegation's statement, adding that they "favor[ed] consensus with a voting option if consensus can't be reached ... [and this] can be used where other bodies can't make timely decisions"<sup>44</sup>. This may have been a reference to CCAMLR, where Parties have repeatedly failed to reach consensus on several longstanding MPA proposals (East Antarctic which has been under negotiation since 2011; Weddell Sea since 2016; and the western Antarctic Peninsula since 2018)<sup>65</sup>. The need for consensus resulted in a 35-year limit on the Ross Sea region MPA, which was originally proposed to have no duration, then proposed to have a duration of 50 years with other Members requesting 20 years. Finally, Member States agreed to 35 years (halfway in between 20 and 50) in following years of negotiations<sup>28</sup>. After 35 years, the Ross Sea region MPA will need to be renewed through the same consensus process.

While CCAMLR's consensus requirement is intended to promote active collaboration towards a common goal, it has led to lengthy negotiations and allows a single delegation to halt progress or act in "bad faith"<sup>26,66,67</sup>. The BBNJ Agreement calls for Parties to strive for consensus, but that if consensus cannot be reached, to strive for three-fourths majority<sup>17</sup>. If three-fourths majority cannot be reached, the COP will then move to a two-thirds majority<sup>17</sup>.

Nearly all interviewees brought up the competency of CCAMLR as an IFB in relation to the BBNJ Agreement, which has a requirement that it cannot undermine relevant bodies. Sentiments varied on how the BBNJ Agreement may work with CCAMLR, as well as how CCAMLR may respond to the BBNJ agreement and its structure. Haward highlights the potential interactions between CCAMLR and the forthcoming BBNJ Agreement, noting that there are four different types of potential interactions: competence, complementarity, congruence, and competition<sup>68</sup>. Haward additionally argues that the dominant form of interaction between the two regimes will likely be competence, consistent with the majority of the interviewees<sup>68</sup>.

However, there are also concerns at the continued functional competency of CCAMLR as an IFB, especially given the years of various stalemates in decision-making in part because of the consensus requirement<sup>60</sup>. Goldsworthy found that CCAMLR Member States have been more successful in reaching consensus on fisheries measures than on broader conservation measures<sup>60</sup>. Some respondents noted that if CCAMLR is found to be unable to reach consensus on MPAs internally, the BBNJ Agreement may play a role in facilitating the establishment of MPAs in the Southern Ocean. Indeed, several respondents felt that the BBNJ Agreement may "kickstart" more action in the Southern Ocean when it comes to MPAs. For example, Interviewee 001 stated that "the fully, entered-into-force and implemented BBNJ Agreement could [result in stalled CCAMLR MPA proposals] tak[ing] on another life within the BBNJ [structure] as MPA proposals". Similarly, Interviewee 006 explained that while others felt that "CCAMLR shouldn't be interfered with because they're already doing a good job, or they already have competence" they themselves "think that's incorrect" and that they felt "it's very obvious that CCAMLR is not delivering [on MPAs]."

Additionally, several respondents noted that there have been efforts in the BBNJ Agreement negotiations to exclude Antarctica and the Antarctic regime, with the Antarctic Treaty System stating that they should be the primary competent IFB for the Southern Ocean<sup>68,69</sup>. Interviewee 004 revealed that during BBNJ Agreement negotiations, their delegation's position was to be "as ambitious as possible, so long as [the BBNJ Agreement] does not touch CCAMLR" and that within the ABMTs section, their delegation's approach was "premised on sort of how to keep CCAMLR out of it", showing a potential competitive interplay. Interviewee 006 had similar experiences, stating that while "some countries are advocating for a stronger relationship [between the BBNJ

Agreement and IFBs] ... it's unfortunate that countries that participate in [CCAMLR] ... have said that we don't want a strong treaty [and are] trying to put language in the treaty to minimize the interaction between those bodies and the treaty". Interviewee 006 then stated that delegations were "thinking 'Oh, let's carve out CCAMLR' or 'Let's keep CCAMLR separate'". They went on to add that that "unhelpful" attitude does not represent "what should be the goal of the treaty, which is how to conserve this place that is the majority of our planet".

Interviewee 005 highlighted that this nexus of the BBNJ Agreement and IFBs such as CCAMLR represents "a place for cooperation and coordination, because we would want that across the international governance framework, sharing of information, sharing of knowledge". Interviewee 006 noted that "one of the possible great opportunities with this treaty is that it kind of brings people of that narrow [box], like everything is in a little regional or one organization box [and] that fragmented approach to ocean governance is not working".

One aspect of the BBNJ Agreement is that it will "not undermine" other existing international frameworks or bodies. In this instance, CCAMLR does represent an international body that intersects with several of the package elements of the BBNJ Agreement, such as through ABMTs and MPAs<sup>70</sup>. Much of the concern related to the interactions between CCAMLR and the BBNJ Agreement are related to sovereignty claims within the CCAMLR area, including issues related to the South Georgia and South Sandwich Islands over which the United Kingdom and Argentina have competing territorial claims<sup>71</sup>. The newly adopted BBNJ Agreement notes that disputes related to sovereignty claims that are within the competencies of other bodies (such as CCAMLR) are not eligible for an advisory opinion provided by the International Tribunal for the Law of the Sea<sup>17</sup>.

### Lesson learning

For this work, we define lesson learning as knowledge or understanding gained through previous experiences related to either organizational aspects or governance. Interviewees also brought up that CCAMLR can still have a positive influence on the BBNJ Agreement, especially in the later stages when the Agreement is operationalized to include a COP as a decision-making body and the STB, as well as financing the overall BBNJ Agreement structure. Additionally, CCAMLR may serve as an example of policies related to MPAs on the high seas. CCAMLR is the operational structure for the CAMLR Convention, which is considered a part of the larger Antarctic Treaty System<sup>72</sup>. CCAMLR's architecture includes a Secretariat, which is split into six departments (Executive; Science; Fisheries Monitoring and Compliance; Communications, Data and Information Systems; and Finance, Human Resources and Administration)<sup>73</sup>. There is also a Scientific Committee and its subsidiary working groups and the Commission has two subsidiary bodies: a Standing Committee on Implementation and Compliance and a Standing Committee on Administration and Finance<sup>73</sup>.

Interviewees noted that while CCAMLR is not a perfect governance body, there were some operational takeaways that the BBNJ Agreement could look to as the Agreement creates its internal structure. Interviewee 009 noted that:

"You have to establish the Conference of Parties, so what to do? [Is BBNJ] going have a science and technical body committee ... because in CCAMLR, they have a scientific committee ... [what BBNJ wants] is going to be kind of operationalized [by CCAMLR]."

This sentiment was echoed by Interviewee 004, who noted that while the Scientific Committee of CCAMLR has been good, in the last few years the Scientific Committee has deteriorated due to the

politics within CCAMLR. This may prove an interesting opportunity for the potential STB of the BBNJ Agreement to learn from the Scientific Committee of CCAMLR on how to avoid politicizing the STB—a concern that was voiced by some delegations during the IGCs. ENB reported during IGC-3 that the Russian Federation suggested deleting the article outlining the STB as the provisions in the article would create a "politicized and overly bureaucratic body"<sup>74</sup>.

Interviewee 004 also noted that the BBNJ Agreement could look towards CCAMLR's Standing Committee on Implementation and Compliance if they intend to have a similar mechanism. They further stated that "when [the Compliance Committee] is working, [it] can be good .... I saw very positive experiences with [a Member State of CCAMLR] around the Compliance Committee, like willingly reporting non-compliance, willingly reporting the penalty".

Interviewee 009 went on to note that the financial aspects of CCAMLR may prove useful for the BBNJ Agreement's structure, noting that a hurdle to the negotiations is the financing mechanism. Interviewee 009 stated that decision-makers involved in BBNJ negotiations could "look at CCAMLR to see what were their costs involved", with these costs reflecting the overall CCAMLR operation.

The text of the BBNJ Agreement includes language about establishing a COP to make decisions, an STB, a financial mechanism, a compliance mechanism, and a clearing-house mechanism<sup>17</sup>. Of note, these establishments may deal with all elements of the package, and not solely ABMTs, including MPAs. Additionally, the architecture of the BBNJ Agreement bodies would likely need to interact with other global and regional institutional bodies, such as the Division of Ocean Affairs and Law of the Sea, the International Tribunal for the Law of the Sea, as well as other regional fisheries bodies, something that CCAMLR does not need to cope with as a part of the Antarctic regime since they have largely internal dispute resolution processes<sup>13</sup>. The Antarctic regime is largely self-sufficient, with the ability to govern many human activities within the CAMLR Convention area. CCAMLR's mandate is limited to marine living resources and the ecosystem, while the Antarctic Treaty has mandates related to not just environmental protection such as the ban on mining, but also scientific research and operations in Antarctica<sup>24,75,76</sup>.

While the architecture of the BBNJ Agreement's ABMT portions could look towards CCAMLR, there may be some limitations to the way in which the CCAMLR structure operates with regards to MPAs in particular. For example, CCAMLR suffers from a lack of stakeholder outreach, as well as unsustainable financing and staffing to support MPA implementation and management<sup>32</sup>. Additionally, the Scientific Committee advises CCAMLR on the scientific merit of MPA proposals, but faces opposition from some CCAMLR Member States, especially around if the proposals are based on the best available science<sup>31,77</sup>. While best available science is key for a precautionary and ecosystem-based approach, which CCAMLR mandates<sup>78</sup>, there is disagreement among some Member States about what constitutes the best available science in the context of MPAs, despite it being clearly defined in CCAMLR's Articles and Resolutions<sup>79,80</sup>. Under Article 7: General principles and approaches of the BBNJ Agreement, the use of best available science and scientific information is listed, but the interpretation of what constitutes best available science and scientific information remains to be seen<sup>17</sup>. It may become a similar situation to CCAMLR where Member States disagree on this matter<sup>80</sup>.

Interviewees referenced relevant CMs often. For example, Interviewee 007 stated that BBNJ could learn from CCAMLR's "process of establishing MPAs and monitoring and research programs". They also went on to note that there is the potential for "a lot in the MPA section of the BBNJ [Agreement]" for CCAMLR to inform on, including "in terms of [CM] 91-05 and the general MPA provisions [91-04]". Interviewee 008 noted that "CCAMLR has

its own system, or CM 91-04 ... [and that] the actual contents on how you manage the area-based management measures might be something eventually BBNJ [Agreement] might like to have a look at". Interviewee 008 also noted that CCAMLR, like other organizations that deal with fisheries, have a [research] fishing measure (CM 24-01: The application of conservation measures to scientific research), and that though BBNJ negotiations have not discussed exploratory fishing to date, if it was to be brought into consideration, the BBNJ structure would not "need to invent some [research fishing] system from scratch, because [research fishing systems] are all over... in CCAMLR and other regional fisheries management organizations".

There are also more generalized governance lessons that the BBNJ Agreement can look to from CCAMLR, as Interviewee 003 stated:

"CCAMLR is on the forefront of high seas MPAs ... and what you need in terms of underlying science, plans, research, monitoring, if you have open/closed seasons and various details, and science fishing and all that that goes on in an MPA ... all those are some concepts that both ABMTs [of the BBNJ Agreement] and CCAMLR MPAs need to grapple with."

Currently, two Member States of CCAMLR are preventing the approval of the Ross Sea region MPA research monitoring plan, since approval requires consensus. Interviewee 003 stated that "those sorts of learnings can't be taken to the BBNJ [negotiations] ... [the Ross Sea MPA has] a good research monitoring plan, but in fact it hasn't been adopted ... but it was agreed to by the Scientific Committee" and went on to further express that they think that is one of the issues that the BBNJ Agreement could look towards CCAMLR for lessons learned.

Interviewees also noted that CCAMLR has successfully established MPAs, and that there was the potential for learning on the adoption, establishment, and review of MPAs be for the BBNJ Agreement's COP.

"The fact that [CCAMLR] actually put an MPA through a process into a practice, because there aren't many organizations that have done it, very few ... so that's been useful."

– Interviewee 005

CCAMLR does have a process for the designation and establishment of MPAs via CMs. For example, CM 91-04 outlines a general framework for establishing MPAs, which includes best practices guidelines, such as: to protect representative marine ecosystems, biodiversity and habitats, including key ecosystem processes and species as well as vulnerable, unique or rare habitats and features; to establish scientific reference areas for monitoring natural or human-induced changes; to establish specific objectives, restrictions, spatial boundaries, and a determined period of designation; to develop a management plan and a research and monitoring plan; and a review every 10 years or as agreed by the Commission<sup>27</sup>. The CMs for the SOISS and Ross Sea region MPA (CM91-03 and 91-05, respectively) includes the specific details pertaining to the MPAs, including objectives, boundaries and prohibitions<sup>28,29</sup>. Such CMs may prove useful when it comes to crafting language for how MPAs are designated through the BBNJ Agreement.

Despite successfully adopting CMs for MPAs, agreement on MPA research and monitoring plans has been difficult in CCAMLR. CM 91-04 stipulates that the Commission must adopt a research and monitoring plan for each MPA<sup>27</sup>. However, the SOISS MPA, unlike the Ross Sea region MPA, predates the adoption of CM 91-04, potentially negating the need to comply; though discussions at CCAMLR have spoken about harmonizing 91-03 and 91-04

regarding the requirement of the monitoring plan<sup>25,27</sup>. Towards harmonization, in 2014, a draft research and monitoring plan for the SOISS MPA was presented to CCAMLR but was not adopted due to lack of consensus; a revised draft plan was resubmitted in 2018 and still has not been formally adopted, due to the opposition of two members<sup>81,82</sup>. A research and monitoring plan for the Ross Sea region MPA was developed in 2017 and was endorsed by the Scientific Committee that same year<sup>83</sup>. However, like the SOISS MPA, its research and monitoring plan was not adopted due to a lack of consensus in the decision-making process. The lack of consensus appears to be more of a political issue than a scientific one, and both the SOISS and Ross Sea region research and monitoring plans are being implemented to some degree<sup>32,82</sup>; however the lack of adoption prevents full implementation. A research and monitoring plan is key for MPAs as it outlines a pathway to evaluate and monitor the MPA<sup>84</sup>. The BBNJ Agreement will require Parties to submit a draft proposal and a draft management plan, which will then be publicly available as well as sent to the STB for a preliminary review<sup>17</sup>. The submitted draft management plan will include proposed monitoring, research and review activities that will aid in achieving the stated objectives of the MPA<sup>17</sup>.

### Exclusivity of CCAMLR

One hurdle throughout the BBNJ negotiations that has affected both setting precedence and the lessons learned is the exclusivity—i.e., the private nature—of CCAMLR. This exclusivity was generally seen as having a negative effect both on the BBNJ negotiations and internally at CCAMLR, as it promoted insider knowledge and led to complicated relationships with fellow delegations.

The Member States of CCAMLR and the Antarctic Treaty have not actively engaged in the BBNJ negotiations in terms of Antarctica<sup>68,85</sup>. This hesitancy for CCAMLR Member States to not include Antarctic viewpoints in their national perspectives throughout the UN system is not new, but never has a treaty been negotiated to fulfill remaining questions surrounding the governance of ABNJ<sup>86</sup>. The "Question of Antarctica" has been investigated by the UN several times<sup>86</sup>. Both CCAMLR and the Consultative Parties to the Antarctic Treaty were resistant to participate in the BBNJ Agreement negotiations, and have historically been resistant to participating in any UN forum<sup>69,86</sup>.

Many of the allusions to the Antarctic regime [see below] may not have been fully understood by BBNJ delegations that are not active in CCAMLR. Interviewee 002, discussing a delegation's position at one of the IGCs that they had attended, mentioned that "[t]here was only about four or five of us in the room at BBNJ who had anything to do with CCAMLR, who knew what [the delegation] was talking about [when discussing CM 91-04]." This may be due to differences in governmental departments—for example, a government might send a representative from a body primarily focused on fisheries to CCAMLR, while sending a representative from an international affairs body to the BBNJ Agreement negotiations. The insider knowledge of CCAMLR both acted as a barrier, such as above, and also as a way to further national positions in the Antarctic region. As one interviewee pointed out:

"[T]he Antarctic [regime] mob is such a club that other people just have got no idea and it was that was the point at which I thought that was a damaging thing. If people had been more aware what had been going on in CCAMLR for the last few years, I think we would have got off to a better start on MPAs at BBNJ."

–Interviewee 002

Interviewee 004 expressed that the insider knowledge "has been very impactful in that there have been hidden red lines by

some delegations that directly relate to the [Antarctic regime]". Many of these red lines are related to sovereignty disputes throughout Antarctica (including historic sovereignty claims which are suspended under the Antarctic Treaty), as well as where the BBNJ Agreement may have jurisdiction even through those disputant claims. Several interviewees, when asked how CCAMLR Member States have reacted to the BBNJ negotiations, indicate that while CCAMLR is aware of the BBNJ negotiations, there are few references to it at this time, in part because the BBNJ Agreement is still being negotiated and in part because:

"[CCAMLR delegations] totally have a sense of ownership to [the] Antarctica situation, Antarctic region, Antarctic peers ... they probably don't like to have any outside influence [such as the BBNJ Agreement], or some additional situations that might or might not complicate the Antarctic situation."

-Interviewee 008

The insider knowledge and exclusivity of the overall Antarctic regime was also described by Interviewee 006 as "an outdated relic" especially given that "from an ecological standpoint, Antarctica is far away, but it's not separate from [ecological and climate] things." The insider knowledge and exclusivity of CCAMLR leads to a lack of transparency, or as the same interviewee put it:

"[T]hese countries represent millions, billions of people and they're making these decisions, and who are they making these decisions for .... People all over the world have signed petitions saying they want to see [Antarctic] MPAs designated ... in this time of more environmental awareness and more awareness of change in biodiversity loss, countries should be feeling accountable to their population during decision-making ... [and] the closed-offness of CCAMLR doesn't help with that."

CCAMLR is a small enough group and venue that it allows for face-to-face dialog between delegations, many who are staffed by the same people for years on end, which allows for trust-building<sup>48</sup>. While CCAMLR was invited to attend the BBNJ Agreement negotiations, no one from the CCAMLR Secretariat attended<sup>70</sup>. This may be in part due to the fact that, historically, CCAMLR has remained independent of the UN treaty system (as noted above)<sup>48</sup>. However, while these close relationships and the associated exclusivity may be useful in the internal context of CCAMLR, it does prevent the dissemination of important and useful information to other governance arenas and may lead to complicated relationships in those arenas, such as with the BBNJ Agreement negotiations<sup>68,85</sup>. In terms of stakeholder engagement and the BBNJ Agreement, the Agreement does require that MPA proposals are collaborative, with input from relevant stakeholders and that proposals are made public<sup>17</sup>.

"Everyone's far too friendly with each other. Like, it's weird."

-Interviewee 004

Interviewees also expressed both positive and negative sentiments around the relationships and camaraderie formed at CCAMLR, especially their annual meeting. The small size of CCAMLR—with 26 Member States and the EU—and the remote location fed into these relationships. Interviewee 002 recounted at a CCAMLR meeting how they, along with an Ambassador, were able to wait for key delegations to come back from lunch and have a side conversation about the proceedings, which ultimately led to a CM being passed. They also expressed that due to

CCAMLR's smaller size, "you can stand shoulder to shoulder with the neighbors who you know, and that trust is really important". Indeed, trust is key in terms of the governance of common pool resources, such as fisheries, and the wider marine environment<sup>87</sup>. Trust has been shown to increase cooperation and participation in group dynamics<sup>88</sup>.

Unlike Interviewee 002's positive interaction with the small group size, Interviewee 004 had a different opinion. They stated that the relationships between their delegation and others resulted in a "kind of unresolved conflict between [the delegations]" and that they thought the remote location "doesn't make for healthy debate." Interviewee 004 went on to state that "you form this weird allegiance with the other people you're sitting with [at the CCAMLR meeting]", but then goes on to state that this is "not helpful .... because we all go to Tasmania .... we hang out in this tiny town, at the bottom of the world [with] people we were meant to be campaigning against sometimes".

Interviewees pointed out that the location of the BBNJ structure, such as the COP, could prevent some of the factors associated with the exclusivity of CCAMLR. This also addresses a different common theme across interviews: the location of CCAMLR. The annual meeting for CCAMLR occurs in Hobart, Tasmania, Australia, which for many participants is far away from not just their home base, but also from the embassy for their home country. The location of CCAMLR's annual meeting creates logistical issues along with complex relationships. Interviewee 004 said, when comparing the annual CCAMLR meetings and the future BBNJ Secretariat, "[t]here's no embassy [in Tasmania] ... I think there are a lot of downsides of the new [BBNJ] Secretariat being in New York, but the huge upside is there are always senior country officials from every country on Earth". This interviewee went on to describe the issues their delegation faced with trying to communicate with ministers and high-level officials back in their home country, stating that Hobart, Tasmania is "is so far away from most time [zones] most people in the global majority [are] nowhere near that [Hobart] time [zone]" while also noting that this occurs at the BBNJ negotiations too for some delegations, such as for the Pacific Small Island Developing States.

The exclusivity of CCAMLR, such as a lack of awareness of the proceedings and its consequences, may result in delegations in the BBNJ Agreement negotiations taking a stance without knowledge or consent on complex issues, such as sovereignty. This also results in a lack of understanding of delegation's meaning, defined as the content and quality of social relationships within the contexts that they take place in<sup>89</sup>. This meaning is then lost on those not active in both spaces<sup>89,90</sup>. This meaning is key, as it plays a part in determining how successful such a collaborative governance approach will be as it effects the behaviors of stakeholders and how an organization structure, such as the BBNJ Agreement architecture, will take form<sup>90</sup>.

However, the exclusivity—from its smaller group size to a central, albeit inconvenient location—may lend itself in some ways to effective decision-making via collective action. Ostrom outlined design principles that long-enduring institutions often have. These include aspects such as clearly defined boundaries, congruence, collective-choice arrangements, monitoring schemes, graduated sanctions, conflict resolution mechanisms, and right to organize for members<sup>91</sup>. However, group characteristics—in addition to institutional characteristics—play a part as well. Group size, when kept on the smaller side, allows for more interactions across individuals of the group, builds trust, and increases cooperation due to the high potential for future interactions<sup>92</sup>. Heterogeneity of the group, however, may negatively affect collective action. A group being more heterogenous (i.e., sharing a diversity of social, political, economic, or environmental views) may cause conflict in the group<sup>92</sup>. This divergence of viewpoints and conflict can affect decision-making, especially when consensus is required.



## Broader implications

With the BBNJ Agreement newly adopted, the final Agreement is finally available. It seems that while CCAMLR influenced the negotiations and potential text, little of the influence can be read in the final text. For example, the BBNJ Agreement will not require consensus for the establishment of ABMTs, including MPAs—rather, it will strive for consensus and then revert to a two-thirds majority if consensus cannot be reached<sup>17</sup>. Additionally, a set duration is not a requirement of an MPA proposal<sup>17</sup>.

The BBNJ Agreement will go into effect after 60 State Parties ratify the Agreement, which opened for signature starting in September 2023 through September 2025. These two years will allow CCAMLR time to decide internally how much it wants to work within the BBNJ Agreement structure. However, as the Agreement provides a new framework for establishing high seas MPAs, we can expect some hurdles that the COP and State Parties will need to work through. This is an opportunity for CCAMLR to be an active participant in the COP of the BBNJ Agreement—which they have influenced—with their own lessons learned and hurdles, while fighting through their internal exclusivity. This participation by CCAMLR will also solidify their role as a competent IFB. CCAMLR can assist the ABMTs portion of the BBNJ Agreement by elucidating their own internal struggles on best available science and consensus. They can also provide context to how they function in terms of organizational architecture, such as providing recommendations on how to have an effective STB, based on their own Scientific Committee. In short, BBNJ's future work towards high seas MPAs has much to gain from the lessons learned at CCAMLR, but CCAMLR Member States must come to the table and work alongside that process. As the primary IFB which has created high seas MPAs, CCAMLR has an opportunity to continue to lead in this process.

## METHODS

### Data triangulation

In order to capture a complete picture of the influence of CCAMLR on the BBNJ Agreement negotiations, we triangulated data through multiple sources—interviews, ENB reports, ethnographic notes, and additional documents<sup>93</sup>. This is key because any one of those data sources would provide context from only a single viewpoint. For example, interviews are through the lens of the person being interviewed meaning that they are subject to their own positionality and bias, and therefore are one version of reality<sup>94</sup>. However, when additional data is collected from various sources, it can be corroborated or augmented with other forms of evidence as a means to triangulate converging lines of inquiry.

### Ethnographic notes

This work utilized both participant observations and ethnographic notetaking. Participant observation allows researchers to study people participating in activities within the context of the setting—in this case, the activity being negotiations and the setting being UN Headquarters in New York City, New York, United States<sup>95</sup>. In participant observation, there are also aspects such as natural conversations and other unobtrusive methods, such as ethnographic notetaking<sup>95</sup>. While notes from all delegation's interventions were taken, this work focuses on the Member States of CCAMLR who are present and active in the BBNJ negotiations. Voting blocs that may include individual Nation States were not analyzed, with the exception of the EU.

The lead author attended four of the five (IGC-2–IGC-5) meetings on an observer delegation pass through a university affiliation, including the extended session of the fifth IGC in 2023. When sessions moved into a parallel format, the lead author prioritized attending the ABMT discussions. Through these meetings, ethnographic notes were taken, getting as close to

verbatim statements as possible. The lead author had been attending the BBNJ meetings since the first Preparatory Committee, giving them status as an insider, which aided in gaining entrée<sup>96</sup>. For this research, participant observation and ethnography were employed for the IGCs. Fieldnotes of conversations, statements, and observations were kept while embedded in the overall process<sup>97</sup>. In the observer's sections, laptops were prominent, allowing for the “participating to write” form of notetaking<sup>97</sup>. One hundred and eighty-two pages of ethnographic notes were collected across the IGCs that the lead author attended.

### Additional data collection

ENB is the flagship publication of the International Institute for Sustainable Development (IISD). IISD sends reporters to relevant environmental meetings in the UN system and is seen as the independent reporting service of the UN. For all the meetings related to the BBNJ treaty, ENB produced Conference Reports, a succinct and unbiased summary report of each day of the meeting<sup>98</sup>. At the end of each IGC, a larger summary and analysis is produced. These reports are available during the meetings (<https://enb.iisd.org/>) to provide participants and the public with transparent news and updates. 106 total pages of ENB reports were coded. See Supplementary Table for full list of ENB reports coded.

Additional documents that were made publicly available were analyzed for direct references to the Antarctic regime. These included submitted statements from delegations during IGC-2, conference room papers from IGC-3, drafting proposals from IGC-4, as well as textual proposals from both IGC-4 and IGC-5, which were all accessed from the UN BBNJ website<sup>99</sup>. Due to the large amount of data (1,277 pages in total), only direct references were coded. See Supplementary Table for a full list of additional documents coded.

### Semi-structured interviews

Approval for semi-structured interviews was obtained through the Institutional Review Board via the Research & Innovation Office at CU Boulder. Participant lists for IGC-4 (March 2022), IGC-5 (August 2022) and both the 2020 and 2021 annual CCAMLR meeting were compared for shared persons across both forums, resulting in only 20 participants who were active in both sets of meetings. This overlap of only 20 participants shared between the BBNJ Agreement IGCs and the annual CCAMLR meetings represents a small portion of the average number of participants at each meeting overall—for example, at IGC-3, there were well over 1000 registered participants. This lack of overlap may be due to the difference in Member States' government departments—for example, a Member State might send a representative from their fisheries department to CCAMLR and a representative from their international affairs department to the BBNJ Agreement negotiations.

Emails were obtained for all participants ( $N = 20$ ), and a total of three emails requesting interviews were sent out to each person. 10 persons responded to the interview request (50% success rate), three who were affiliated with government agencies, and seven who were affiliated with non-governmental organizations (NGOs)<sup>100</sup>. Highly visible NGOs may influence the governance process through acting as a boundary organization, providing scientific and sociopolitical guidance to state actors<sup>101</sup>. NGOs do exist across a spectrum of discourse framings, from reformative (i.e. trying to improve upon existing structures) to radical (i.e., trying to change existing structures)<sup>102,103</sup>. While NGOs are not afforded a vote in either the BBNJ Agreement or CCAMLR context, they do provide delegations with information, such as policy briefs. All interviews occurred between October 2022 and December 2022 over Zoom. Each interview lasted about an hour, which was recorded and then transcribed. The semi-structured format allowed for a more ease of flow of conversation, allowing



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E.S.N.: conceptualization, methodology, data gathering, visualization, investigation, formal analysis, writing—original draft. C.M.B.: conceptualization, writing—original draft.

## COMPETING INTERESTS

The authors declare no competing interests.

## ADDITIONAL INFORMATION

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