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Revisiting Bioprospecting in the Southern Ocean in the Context of the BBNJ Negotiations

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ABSTRACT

This article revisits marine bioprospecting in the Southern Ocean in the context of the efforts to develop an international legally binding instrument (ILBI) under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction. After briefly introducing the Antarctic Treaty System (ATS), this article examines the extent to which the ILBI will likely spatially overlap with the ATS. As the next step, it is highlighted that future provisions on marine genetic resources (MGRs) in the ILBI might substantively differ from the way the ATS currently regulates bioprospecting. Based on that, the final section reflects on how the ILBI will normatively and institutionally relate to the ATS.

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Introduction

Bioprospecting activities in the Southern Ocean have already prompted substantial scholarly attention.¹ As shown in this article, revisiting this issue is warranted, however, in the context of efforts to develop an international legally binding instrument (ILBI) under the United Nations Convention on the Law of the Sea (LOSC)² on the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction (BBNJ).³

The Biodiversity Beyond National Jurisdiction process (BBNJ process) initially started in 2004,⁴ but decisively picked up pace in December 2017, when the United Nations General Assembly (UNGA) decided to convene an intergovernmental conference (IGC), in order to develop the text for a future ILBI.⁵ In Resolution 72/249, the UNGA scheduled four substantive sessions of the IGC, and at the time of writing, three out of four sessions have already taken place.⁶ While the BBNJ delegations are still negotiating the ILBI's content, it is noteworthy that the President of the Conference prepared a first Draft Text for the ILBI prior to IGC III.⁷

As one of its four subject matters, the ILBI is intended to address “marine genetic resources, including questions on the sharing of benefits.”⁸ However, the ILBI will not

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be developed in a legal vacuum, but rather within the context of the current global and regional legal frameworks for BBNJ.⁹

Globally, the LOSC and the Convention on Biodiversity (CBD),¹⁰ albeit subject to jurisdictional limitations,¹¹ constitute two “main framework treaties” for BBNJ.¹² In addition to those global treaties, the Antarctic Treaty System (ATS) represents an example of a regional regime for BBNJ.¹³ The ATS consists, inter alia, of the Antarctic Treaty (AT),¹⁴ the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR),¹⁵ and the Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol).¹⁶ The ILBI will thus likely overlap with the existing global and regional regimes for BBNJ, which means that “a major concern in negotiating the ILBI is the avoidance of the potential for fragmentation of the law and decision-making procedures.”¹⁷

Bioprospecting, which can be defined as “the process of identifying unique characteristics of marine organisms for the purpose of developing them into commercially valuable products,”¹⁸ is already subject to a complicated regulatory setting in the Southern Ocean.¹⁹ The reason for this is that not only the different instruments of the ATS, but also the LOSC and the CBD are relevant for its regulation in the Southern Ocean.²⁰

To the extent that the future ILBI will apply to the Southern Ocean, the ILBI could thus further complicate the current regulatory situation. For instance, Scott pointed in the context of the BBNJ process to a “potentially competitive relationship between the ATS and external regimes” for the regulation of bioprospecting.²¹ In this respect, Scott further stressed that the “simultaneous or even sole regulation of Antarctic activities by external regimes or organisations creates the risk that the ATS is more generally undermined.”²²

Against this backdrop, this article revisits the issue of marine bioprospecting in the Southern Ocean in the context of the ongoing BBNJ negotiations. In so doing, the second section briefly introduces the Antarctic Treaty and the ATS. The third section examines the extent to which the ILBI will likely spatially overlap with the ATS. The fourth section highlights that future provisions on marine genetic resources (MGRs) in the ILBI might substantively differ from the way the ATS currently regulates bioprospecting. Based on that, the fifth section reflects on how the ILBI will normatively and institutionally relate to the ATS, and the sixth section provides some conclusions.

The Antarctic Treaty and Antarctic Treaty System

The Antarctic Treaty was concluded in 1959 against the background of disputed sovereignty over Antarctica.²³ As a key provision, Article IV of the Antarctic Treaty “preserves the differing legal positions of the parties.”²⁴ That refers to the position of the seven claimant states,²⁵ which asserted sovereignty over partly overlapping parts of the Antarctic continent, as well as the position of the nonclaimant states, which have previously rejected and continue to reject any claim to sovereignty over Antarctica.²⁶ Thereby, the Antarctic Treaty “makes no attempt to settle the many conflicting territorial claims in Antarctica, but, instead, “freezes” the legal *status quo*.”²⁷ As a result of Article IV of the Antarctic Treaty, there also remains one unclaimed sector in Antarctica.²⁸ Substantively, the Antarctic Treaty stipulates, inter alia, that “Antarctica

shall be used for peaceful purposes only”²⁹ and provides for the “freedom of scientific investigation in Antarctica and cooperation toward that end.”³⁰

Subsequent to the conclusion of the Antarctic Treaty, states involved in the Antarctic region reacted to upcoming environmental challenges by concluding additional instruments, such as CCAMLR and the Madrid Protocol.³¹ CCAMLR, which has as its objective, “the conservation of Antarctic marine living resources,”³² was adopted in light of overexploitation of krill stocks in the Southern Ocean in the 1970s and its feared negative influence on the Southern Ocean’s food chain.³³

The Madrid Protocol, on the other hand, was concluded after the previously adopted Convention on Regulation of Antarctic Mineral Resources Activities (CRAMRA)³⁴ failed to enter into force,³⁵ and aims to achieve “the comprehensive protection of the Antarctic environment and dependent and associated ecosystems.”³⁶ For that purpose, the Madrid Protocol “designate[s] Antarctica as a natural reserve, devoted to peace and science”³⁷ and bans commercial mining.³⁸

Determining the Extent of a Future Overlap Between the ILBI and the Antarctic Treaty System

Addressing the potential differences for the regulation of bioprospecting between the ILBI and the ATS in the fourth section of this article is only necessary if the ILBI spatially overlaps with the relevant instruments of the ATS, such as the Antarctic Treaty, the Madrid Protocol, and CCAMLR. Johnson already briefly addressed the difficulties of determining the extent of a future overlap between the ILBI and the ATS.³⁹ The following thus takes a closer look at this question, based on Johnson’s observations.

To begin with, the Antarctic Treaty, CCAMLR, and the Madrid Protocol vary in terms of their geographical scope and thus apply to a variable degree to the Southern Ocean off the shore of Antarctica.⁴⁰ The Antarctic Treaty’s applicability to the water column and seabed off the shore of Antarctica was a point of disagreement when the Antarctic Treaty was negotiated.⁴¹ This led to the “compromise” in Article VI of the Antarctic Treaty,⁴² which states that

the provisions of the present Treaty shall apply to the area south of 60° South Latitude, including all ice shelves, but nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any [s]tate under international law with regard to the high seas within that area.

Although the wording in the first part of Article VI of the Antarctic Treaty indicates its applicability to the entire area south of 60° South Latitude, this provision was originally interpreted as limiting the applicability of the Antarctic Treaty to the continent itself.⁴³ Yet, as convincingly argued by Auburn, “there would be no need to reserve high seas freedoms if the Treaty did not apply to offshore waters.”⁴⁴ In addition, the interpretation that favors the applicability of the Antarctic Treaty to the maritime parts of the Antarctic Treaty Area (ATA) finds support in state practice.⁴⁵

CCAMLR applies to “the Antarctic marine living resources of the area south of 60 degrees South [L]atitude,” that is, to the ATA. In addition, CCAMLR is also applicable to Antarctic marine living resources northward of the ATA up to “the Antarctic Convergence which form part of the Antarctic marine ecosystem.”⁴⁶ The Madrid

Protocol applies to the ATA,⁴⁷ but there is some discussion as to whether the reference to “dependent and associated ecosystems” in Article 2 of the Protocol could entail a broader applicability northward, beyond the ATA.⁴⁸ To the extent that the future ILBI will apply to the Southern Ocean, the exact area of overlap would thus need to be determined specifically for each of the relevant ATS instruments, as they differ in their geographical scope.

The extent to which the ILBI will likely apply to the area of application of the different ATS instruments is questionable. The general spatial scope of the ILBI is envisioned to extend to “areas beyond national jurisdiction” (ABNJ),⁴⁹ which are defined in Article 1 of the May 2019 Draft Text as the high seas and the Area.⁵⁰ Under the LOSC, the high seas and the Area are defined negatively in relation to areas under national jurisdiction.⁵¹ The high seas encompasses “all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a [s]tate, or in the archipelagic waters of an archipelagic [s]tate.”⁵² The Area, on the other hand, is defined as “the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction.”⁵³

Thus far, the delegations at the BBNJ process have not devoted specific attention to the Southern Ocean. The applicability of the ILBI to the Southern Ocean was not addressed during the Preparatory Committee prior to the IGC,⁵⁴ nor during IGC I, II, and III. There is an interesting parallel here with the Third United Nations Conference on the Law of the Sea (UNCLOS III), during which the LOSC was negotiated. Antarctica and the Southern Ocean were mostly excluded from the negotiations during UNCLOS III,⁵⁵ except for the following statement by Hamilton Shirley Amerasinghe in his capacity as a delegate from Sri Lanka:⁵⁶

I should make it clear that the *question of the status of Antarctica* is in no way linked with the issues before the United Nations Conference on the Law of the Sea and, therefore, this question should not delay agreement on a new Convention on the Law of the Sea.⁵⁷

This statement, combined with the fact that Antarctica and the Southern Ocean did not otherwise feature prominently during UNCLOS III, led some commentators to conclude that the LOSC was inapplicable to the Southern Ocean surrounding Antarctica.⁵⁸ Against this view, Orrego Vicuna argued convincingly that “the exclusion of Antarctica from the ambit of the 1982 Convention’s application would have required an express provision to that effect, which certainly is not the case.”⁵⁹ Specifically in terms of Amerasinghe’s statement, which could have interpretative relevance as part of the drafting history of the LOSC, relying on Article 32 of the 1969 Vienna Convention on the Law of Treaties (VCLT),⁶⁰ it is further noteworthy that this statement was in any case merely concerned with the status of Antarctica and not directed at the general applicability of the LOSC to the Southern Ocean.⁶¹ Similarly to the LOSC’s applicability to the seabed and water column off the shore of Antarctica, it appears that the ILBI would apply to those parts of the Southern Ocean that qualify as the high seas and the Area, unless its applicability to the Southern Ocean is explicitly excluded at some point during the BBNJ negotiations.

The extent of the high seas and the Area in the Southern Ocean, to which the ILBI would apply, can potentially be limited by maritime zones under national jurisdiction asserted from the Antarctic continent and from sub-Antarctic Islands.⁶² It is accepted that maritime zones under national jurisdiction from sub-Antarctic Islands expand into

the ATA, limiting the extent of ABNJ within the ATA, to which the ILBI would apply.⁶³ In contrast, determining the extent of maritime zones under national jurisdiction from the Antarctic continent is a difficult exercise.⁶⁴

As a corollary of the disputed sovereignty over Antarctica, the very existence of coastal states in Antarctica is subject to differing views among scholars, as well as among the claimant and nonclaimant states.⁶⁵ Based on the argument that there are no coastal states in Antarctica, Joyner suggested that “the great white continent appears to be surrounded exclusively by waters having the legal status of high seas.”⁶⁶ Following this logic, it was similarly proposed that the seabed and subsoil off the shore of Antarctica could qualify as the Area.⁶⁷ In terms of the unclaimed sector, Rogan-Finnemore opined that “the unclaimed sector of Antarctica clearly does not generate maritime zones and therefore the marine off-shore area of the unclaimed sector is considered high seas.”⁶⁸ By implication, the seabed off the shore of the unclaimed sector could also constitute the Area.⁶⁹ Assuming that there are no coastal states in Antarctica, the ILBI would thus apply to the entirety of the water column, as well as the seabed surrounding the Antarctic continent, while its applicability to the Southern Ocean would not extend to the maritime areas under national jurisdiction from the sub-Antarctic Islands, mentioned in the preceding.⁷⁰

However, the seven claimant states regard themselves as coastal states and have asserted a variety of maritime zones from their claimed territories in Antarctica.⁷¹ For instance, Australia, Argentina, Chile, and France have claimed an exclusive economic zone (EEZ) from their respective sectors in Antarctica.⁷² In addition, the claimant states have either submitted (preliminary) information to the Commission on the Limits of the Continental Shelf (CLCS) or instead reserved the right to submit such information to the CLCS, as an expression of their assertion to a continental shelf beyond 200 miles from the Antarctic continent.⁷³ Evidently, accepting the validity of any maritime zones under national jurisdiction asserted from the Antarctic continent would have the consequence that the ILBI would not be applicable to those maritime areas, as they would not qualify as ABNJ.

In addition to the controversy as to whether there are coastal states in Antarctica, a secondary question is whether Article IV of the Antarctic Treaty prevents the claimant states from asserting maritime zones under the LOSC that did not exist at all or not to the same extent when the Antarctic Treaty was adopted in 1959.⁷⁴ More specifically, it is questionable if the assertion of a 12-mile territorial zone, a 200-mile EEZ, or a continental shelf within or beyond 200 miles, as provided for by the LOSC, would constitute a “new claim” or an “enlargement of an existing claim” in the sense of Article IV of the Antarctic Treaty.⁷⁵ In this context, Johnson has argued that “the area of application of the ILBI in the Southern Ocean cannot be wholly identified during the life of Article IV of the Antarctic Treaty.”⁷⁶ It appears, however, that Article IV of the Antarctic Treaty would not per se make the area of application of the Southern Ocean unidentifiable, but rather, subject to different interpretation among the claimant and nonclaimant states,⁷⁷ which was also acknowledged by Johnson.⁷⁸

So far, the fundamentally opposing views regarding the validity of the asserted maritime zones under national jurisdiction from the Antarctic continent have been mediated by the “self-restraint” of the seven claimant states.⁷⁹ That is, the claimant states have

mostly refrained from exercising port and coastal state jurisdiction in their asserted maritime zones.⁸⁰ The challenge of determining the extent of ABNJ within the area of application of the ATS, to which the ILBI would apply, cannot be mediated in a similar way. Instead, it would require the validity of the maritime zones under national jurisdiction asserted from the Antarctic continent by the claimant states to be explicitly addressed. This would also have been required in the case of the asserted extended continental shelf entitlements from the Antarctic continent;⁸¹ however, as noted by Scott, “the economic and physical challenges associated with mineral exploitation [in the Southern Ocean], render[ed] this issue largely moot.”⁸² This is not the case for bioprospecting, which is an ongoing activity in the Southern Ocean.⁸³ In case the ILBI substantively differs from how the ATS currently regulates bioprospecting—a point addressed in the following—determining the extent of the ILBI’s applicability to the Southern Ocean is of consequence and poses a delicate question.

Finally, as observed by Johnson, the area of application of the ATS encompasses some ABNJ, even if the asserted maritime zones under national jurisdiction by the claimant states are taken into account.⁸⁴ The ILBI will thus, in any case, spatially overlap with the different instruments of the ATS, unless its applicability to the Southern Ocean off the shore of Antarctica is explicitly excluded during the BBNJ negotiations.

The Regulation of Bioprospecting: Potential Differences Between the ILBI and the Antarctic Treaty System

In ATCM Resolution 6 (2013), the Antarctic Treaty Consultative Parties (ATCPs) explicitly acknowledged that bioprospecting “continues to occur in the Antarctic Treaty area,” which includes the Southern Ocean up to 60° South Latitude.⁸⁵ In addition, a 2018 Information Paper from the Netherlands (IP 29) provides an overview of the current level of bioprospecting in the ATA and specifically highlights a “multitude of krill-related patents and applications filed in the past two years.”⁸⁶ While the ATCPs thus agree that bioprospecting is an ongoing activity in the ATA, it is noteworthy that the different instruments of the ATS do not mention, let alone define, bioprospecting or genetic material/resources.⁸⁷ This absence of “a working definition of biological prospecting in the Antarctic context” was also stressed in ATCM Resolution 6 (2013).⁸⁸ The Antarctic Treaty and other instruments of the ATS, such as CCAMLR and the Madrid Protocol, do, however, include various general provisions that are relevant to bioprospecting.⁸⁹

Bioprospecting has also received considerable attention by the ATCPs at their annual Antarctic Treaty Consultative Meetings (ATCM) since 2002 and, in particular, during two Intersessional Contact Groups in 2007 and 2009.⁹⁰ For example, the second Intersessional Contact Group focused on issues such as (i) potential definitions of genetic material and resources, (ii) the regulation of access to genetic specimens, (iii) questions of benefit-sharing, (iv) the need to give advance notice of and reporting on biological prospecting activities, (v) the free exchange of scientific information, and (vi) the applicable intellectual property regimes.⁹¹ While the ATCPs have so far been unable to agree on any legally binding regulation for bioprospecting,⁹² they did adopt three

resolutions on bioprospecting in 2005, 2009, and 2013, respectively.⁹³ However, these are only of hortatory character.⁹⁴

At the BBNJ negotiations, states have been and still are particularly divided in terms of how to regulate MGRs in the new ILBI.⁹⁵ This disagreement is partly rooted in divergent interpretations of the current law under the LOSC, especially as far as MGRs in the Area are concerned.⁹⁶ The term “MGRs” is not mentioned in the LOSC, and the BBNJ delegations have yet to agree on a definition.⁹⁷ In addition to the question of how to define MGRs, the negotiating states are also discussing other issues, including (i) the geographical, material, and temporal scope of future provisions on MGRs; (ii) whether the MGRs should be governed by the freedoms of the high seas or instead by the common heritage of mankind principle; (iii) how to regulate (if at all) access to MGRs; (iv) whether to include only nonmonetary or also monetary benefit-sharing obligations; and (v) how (if at all) the future ILBI should deal with intellectual property rights connected to MGRs.⁹⁸

In those parts of the Southern Ocean where the ILBI and the ATS might overlap, bioprospecting activities would be regulated by the ATS as well as by a future ILBI. As discussed further in the following, for ATS state parties that also become party to the ILBI, there may be uncertainty as to which regime to comply with, particularly if the ATS and the ILBI provide for conflicting regulation of bioprospecting. Owing to space constraints, this article cannot provide a thorough overview of the different suggestions made by the BBNJ delegations for future provisions on MGRs⁹⁹ and compare those suggestions to the current regulation of bioprospecting under the ATS.¹⁰⁰ However, in order to illustrate the potential for substantive differences between the two regimes, the next section of this article compares the suggestions made during the BBNJ negotiations for two key aspects of MGR regulation, namely, the regulation of in situ access to MGRs, and the nonmonetary and monetary benefit-sharing obligations, with how the ATS currently regulates those issues.

The Regulation of In Situ Access

For the purpose of bioprospecting, marine specimens can be accessed “in situ,” which refers to “collecting samples of marine organisms (containing genetic material) within their natural surroundings.”¹⁰¹ This can be contrasted to ex situ and in silico access. The term “ex situ” describes accessing MGRs “away from their natural surroundings, such as from culture collections, museums and research institutions,” whereas “in silico” refers to “direct access to genetic data, such as whole genomes or isolated gene sequences.”¹⁰² While the delegations at the BBNJ negotiations disagree as to whether the future ILBI should cover ex situ and in silico access, there is agreement that the ILBI should apply to in situ access.¹⁰³ However, when it comes to how in situ access should be regulated, differing views are held by the members of the delegations. Coye-Felson, the facilitator for the Informal Working Group on MGRs, summarized the discussions at IGC III in 2019 by noting that some delegations favored “free and unimpeded access,” while others supported that in situ access should be “subject to prior notification or a licensing system.”¹⁰⁴

Despite not regulating bioprospecting explicitly, the different instruments of the ATS provide for various general provisions that can be construed as being relevant to the conduct of bioprospecting in the Southern Ocean, including in situ access.¹⁰⁵ As noted in the preceding, the Antarctic Treaty generally grants the “freedom of scientific investigation.”¹⁰⁶ While the term *scientific investigation* is left undefined in the Antarctic Treaty,¹⁰⁷ ATCM Resolution 9 (2009) on bioprospecting explicitly refers to Article II of the Treaty.¹⁰⁸ The freedom of scientific investigation, and thus the “freedom of bioprospecting,” is however, only granted “subject to the provisions” of the Antarctic Treaty.¹⁰⁹ For instance, pursuant to Article III(c) of the Antarctic Treaty, state parties are “to the greatest extent feasible and practicable” obliged to exchange “information regarding plans for scientific programs in Antarctica.”¹¹⁰ In addition, Article VII(5) requires states “to give ... notice in advance, of ... all expeditions to and within Antarctica, on the part of its ships or nationals, and all expeditions to Antarctica organized in or proceeding from its territory.”¹¹¹ The Madrid Protocol further provides for a number of obligations when conducting bioprospecting activities,¹¹² such as the obligation to conduct an environmental impact assessment pursuant to Article 8 of the Madrid Protocol.¹¹³ Furthermore, Article 3 Annex II and Article 7 Annex V of the Madrid Protocol may require a permit for the collection of biological specimens for bioprospecting purposes.¹¹⁴ Notably, ATCM Resolution (2009) points to Annexes II and V of the Madrid Protocol in the context of bioprospecting.¹¹⁵ Yet, as stressed by Drankier et al., the permit requirements in Article 3 of Annex II of the Madrid Protocol do not apply to microorganisms and marine specimens, which they labeled “an important limitation.”¹¹⁶

The ATCPs established the Electronic Information Exchange System (EIES)¹¹⁷ as a simplified mechanism for the state parties to the Antarctic Treaty and the Madrid Protocol to comply with their various reporting requirements.¹¹⁸ However, Information Paper 29 (2018) noted that since 2005 “only a few ATCPs ... have provided information on biological prospecting in the Antarctic Treaty area, and none of them on a regular basis.”¹¹⁹ In this context, Puig-Marcó has highlighted that one fundamental problem is the lack of an agreed definition of bioprospecting, which means that there is no common understanding of what should be reported through the EIES.¹²⁰ In addition to the Antarctic Treaty and the Madrid Protocol, Article 20(2) of CCAMLR requires states to report, inter alia, “information about their harvesting activities” to the CCAMLR Commission, which may be relevant to bioprospecting, if bioprospecting involves harvesting marine resources.¹²¹

To conclude, the ATS provides for a certain level of general obligations, which can be interpreted as being relevant for accessing MGRs in situ. There is consequentially a potential for substantive differences to arise between the current regulation of in situ access to MGRs under the ATS and the proposals in the ILBI. The ILBI would likely be less demanding, in comparison with the ATS, if it provided for “free and unimpeded access” to MGRs, as suggested by some delegations.¹²² By contrast, however, if the ILBI incorporated a “prior notification or a licensing system” for accessing MGRs in situ,¹²³ then whether the ILBI would stipulate more or less stringent requirements for in situ access than the ATS currently does would be determined by the specific requirements of the future regulatory regime. For example, a potential licensing system under the

ILBI could provide for stricter regulation of in situ access compared to the ATS, since the permit requirement in Annex II of the Madrid Protocol is inapplicable to marine specimens.

Nonmonetary and Monetary Benefits

The BBNJ delegations are currently divided when it comes to the question of benefit-sharing obligations in the ILBI.¹²⁴ During IGC I in 2018, one view suggested that the future ILBI should only provide for nonmonetary benefit-sharing obligations.¹²⁵ As potential nonmonetary benefit-sharing obligations, the President's Aid to Negotiations, which was prepared after IGC I, listed "capacity-building, the exchange and public availability of information and scientific knowledge, access to samples and sample collections, access to technology and technical knowledge and transfer of technology."¹²⁶ By contrast, other delegations favored the inclusion of both nonmonetary and monetary benefit-sharing obligations.¹²⁷ These differing views were reiterated during the second substantive session of the ICG in 2019.¹²⁸ For example, the African Group and the Caribbean Community supported the inclusion of mandatory nonmonetary and monetary benefit-sharing obligations.¹²⁹ The Russian Federation and the United States, on the other hand, opposed any monetary benefit-sharing obligation, arguing that the ILBI should instead be limited to addressing voluntary nonmonetary benefit-sharing.¹³⁰

Article 11 of the 2019 Draft Text for the ILBI reflects the differing views in terms of whether the ILBI should provide for only voluntary nonmonetary benefit-sharing obligations or, instead, for mandatory nonmonetary and monetary benefit-sharing obligations. At the time of writing, this question remains unresolved, since the negotiating states were unable to reach agreement in terms of the content of benefit-sharing obligations for the future ILBI during IGC III in 2019.¹³¹

The Antarctic Treaty provides for nonmonetary benefit-sharing obligations pursuant to Article III(1)(c) of the Antarctic Treaty, which requires that "scientific observations and results from Antarctica shall be exchanged and made freely available." In this context, scholars have discussed the extent to which bioprospecting is subsumable under the term *scientific observations and results*, which is not defined in the Antarctic Treaty.¹³² Without addressing this issue in great detail, it can be noted that the three resolutions on bioprospecting, adopted by the ATCPs in 2005, 2009, and 2013, respectively, all mention Article III(1)(c) of the Antarctic Treaty in the context of bioprospecting.¹³³ This may indicate that Article III(1)(c) of the Antarctic Treaty applies generally to bioprospecting.¹³⁴ Jabour and Nicol observed, however, that "the precise nature of the disclosure requirements imposed on Antarctic Treaty parties by Art. III(1)(c) is ... unclear."¹³⁵ In addition, Article III(1)(b) of the Antarctic Treaty also provides that "scientific personnel shall be exchanged in Antarctica between expeditions and stations," which may also be relevant to bioprospecting activities.¹³⁶

While arguably providing for some vague nonmonetary benefit-sharing obligations, the ATS lacks any monetary benefit-sharing obligations.¹³⁷ The introduction of monetary benefit-sharing obligations linked to bioprospecting was, however, discussed by the ATCPs, inter alia, during the already-mentioned second Intersessional Contract Group on bioprospecting in 2009. Here, one view opposed the introduction of monetary

benefit-sharing, arguing “that there was no compelling reason why benefits from the commercialisation of Antarctic biological material should be treated differently from other uses of Antarctica, which are not subject to a sharing regime.”¹³⁸ Contrary to this view, it was proposed “that commercial benefit-sharing should be addressed when scientific observations and results from research on Antarctic biological material are controlled by a patent or some other means, and thus no longer freely available or usable.”¹³⁹ Meanwhile, it can be noted that CRAMRA would have provided for some monetary benefit-sharing obligations in the context of Antarctic mineral resource exploitation.¹⁴⁰ However, CRAMRA never entered into force and was replaced by the Madrid Protocol, which prohibits commercial mining.¹⁴¹ At present the ATS does thus not currently provide for any monetary benefit-sharing obligations linked to bioprospecting.

Similar to the regulation of in situ access, there is therefore an opportunity for substantive differences to develop between the ATS and a future ILBI in relation to non-monetary and monetary benefit-sharing obligations. Since the ATS does not provide for any monetary benefits, the inclusion of such benefits would clearly subject bioprospecting in the Southern Ocean to an additional obligation under the ILBI. The ILBI might also provide for more detailed and clear obligations to share nonmonetary benefits than imposed by the ATS. By contrast, the suggestion by some delegations that the ILBI should only include voluntary nonmonetary benefits would be less demanding than the ATS, since the ATS does provide for mandatory, albeit vague, nonmonetary benefit-sharing obligations.

Normative and Institutional Integration of the ILBI Within the Antarctic Treaty System

The likely spatial overlap between the ILBI and the ATS, combined with the potential for substantive differences for the regulation of bioprospecting, begs the question of how the ILBI would normatively and institutionally relate to the ATS. Notably, the ATCPs have directly reacted to the BBNJ process in the form of a statement issued at the ATCM in 2017.¹⁴² In this statement, the ATCPs asserted “that the Antarctic Treaty System is the competent framework within which to address the conservation and sustainable use of biodiversity in the Antarctic region.”¹⁴³ More specifically, in terms of bioprospecting, the United States noted at the subsequent ATCM in 2018 that “some areas in the Southern Ocean might be covered by a new BBNJ instrument” and proposed to let “the discussions on BBNJ ... play out further before the ATCM sends any signals that marine genetic resources within either the Antarctic Treaty area or the CAMLR Convention Area should be excluded from BBNJ.”¹⁴⁴ In contrast to this suggestion, “most delegations expressed the view that the Antarctic Treaty system must continue to address the issue of bioprospecting, regardless of the BBNJ issue, in light of its inherent competence regarding all activities in Antarctica.”¹⁴⁵

Against this backdrop, the following discussion will reflect on how the ILBI will likely relate normatively and institutionally to the ATS. The distinction between the normative and institutional dimension of the ATS was made by Vidas in the context of the commercial mining ban under the Madrid Protocol.¹⁴⁶ Here, Vidas highlighted a potential normative conflict between the prohibitive approach under the Madrid Protocol and the

permissive approach toward commercial mining under Part XI of the LOSC.¹⁴⁷ In addition, he raised the question of decision-making competence, that is, whether the decision-making fora of the ATCM or, instead, the International Seabed Authority (ISA) established under Part XI LOSC would be competent to regulate mining off the shore of Antarctica where Part XI LOSC is applicable.¹⁴⁸

In practice, this potential normative conflict and clash of decision-making competence did not prove contentious. In this respect, Scott and VanderZwaag stressed that “the physical and economic challenges of mining in the Antarctic have largely alleviated any political pressure to reconcile the relationship between the LOSC and the Antarctic Treaty.”¹⁴⁹ However, they predicted that “this may change” if the state parties of the LOSC were to adopt the ILBI.¹⁵⁰ Since the ILBI is envisioned as an agreement under the LOSC, it has been suggested that the relationship between the LOSC and the ATS could impact the future relationship between the ILBI and the ATS.¹⁵¹

Given the ATCP’s assertion of competence vis-à-vis the BBNJ process and, more specifically, in terms of bioprospecting, it can be noted that state parties of the ATS, which will not become a party to the ILBI, would according to the *pacta tertiis* principle not be bound by the ILBI.¹⁵² While this is straightforward, most state parties to the Antarctic Treaty are also party to the LOSC.¹⁵³ A more complex question is thus whether the ILBI, as an agreement under the LOSC, will affect the interpretation of the LOSC in the future. If this were the case, the ILBI could become relevant to LOSC state parties that are not party to the ILBI. A similar question has arisen in the context of the interpretative influence of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stock Agreement) on the LOSC.¹⁵⁴ In this situation, discussion has focused on whether the UN Fish Stock Agreement qualifies either as a “subsequent agreement” in the sense of Article 31 (3) (a) of the VCLT or instead as “other relevant rules of international law” pursuant to Article 31 (3) (c) of the VCLT.¹⁵⁵ While pursuing this question is beyond the scope of this article, attention can be drawn to the observation by Rothwell et al. that the ILBI’s future normative effect on the LOSC and, more broadly, on the law of the sea will depend considerably on how many states will become a party to it.¹⁵⁶

Future Cross-Membership Between the Antarctic Treaty System and the ILBI

In addition to the question of the future interpretative influence of the ILBI on the LOSC, it is noteworthy that ATS state parties including Australia, China, New Zealand, Norway, and the Russian Federation are participating in the BBNJ negotiations and might thus become a party to the future ILBI. As is well known, the *pacta sunt servanda* rule, which was codified in Article 26 of the VCLT, stipulates that “every treaty in force is binding upon the parties to it and must be performed in good faith.”¹⁵⁷ ATS state parties that also become party to the ILBI may have to decide which regime to comply with if the ATS and the ILBI provide for conflicting regulation of bioprospecting.¹⁵⁸ As indicated in the preceding, the ILBI could subject bioprospecting in the Southern Ocean to monetary benefit-sharing obligations, which the ATS currently does not provide for,

or include more precise and demanding nonmonetary benefit-sharing obligations. When it comes to in situ access, the suggestion by some BBNJ delegations to not regulate in situ access at all would be less demanding than the ATS, which includes some regulation for in situ access. A suggested permit system in the ILBI for accessing MGRs in situ, on the other hand, could entail more stringent regulation in comparison to the ATS.

In addition, similar to the mineral resource ban under the Madrid Protocol, the question of institutional competence, discussed in the preceding, may arise: that is, whether the decision-making fora of the ATS, such as the ATCM or the CCAMLR Commission, or a potential future body in the ILBI would be competent to regulate bioprospecting activities in the Southern Ocean.¹⁵⁹

In the face of a probable overlap between existing frameworks for managing BBNJ, UNGA Resolution 72/249 formulated two normative criteria for the BBNJ process and the future ILBI. The first normative criterion relates to the LOSC and requires that “the work and results of the [intergovernmental] conference should be fully consistent with the [LOSC].”¹⁶⁰ The second normative criterion states that the “[BBNJ] process and its results should not undermine existing relevant legal instruments and frameworks” as well as “relevant global, regional and sectoral bodies” for BBNJ.¹⁶¹ In this respect, Johnson observed that the Antarctic Treaty, CCAMLR, and the Madrid Protocol were all mentioned as “relevant regional treaties” in an *Indicative List of Regional Treaties*.¹⁶²

During IGC I, II, and III (2018–2019), none of the state parties of the different ATS instruments that were participating in the BBNJ negotiations specifically reiterated the assertion of competence of the ATS vis-à-vis the BBNJ process. So far, the normative and institutional relationship between the ILBI and the ATS has thus not been specifically discussed. It would appear, therefore, that a similar approach to that taken with respect to the question of spatial applicability of the ILBI to the Southern Ocean is being applied here. Unless the delegations at the BBNJ negotiations decide to explicitly regulate the relationship between the ILBI and the ATS, the general criterion of not undermining existing frameworks, instruments, and bodies will determine the future relationship between the ILBI and the ATS.¹⁶³

In the literature, the normative criterion of not undermining existing instruments, frameworks, and bodies has been criticized for its “ambiguity.”¹⁶⁴ For example, Dupuy and Viñuales have argued that the notion of “not to undermine” could be either construed “as ensuring a minimum level of protection to BBNJ (the new agreement would thus level the playing field) or conversely, as a reminder that existing instruments ... would prevail over any potential agreement.”¹⁶⁵ It is noteworthy that the May 2019 Draft Text for the ILBI contains a suggestion for a conflict clause in Article 4(3) of the Draft Text, which would operationalize and, thereby, potentially clarify the criterion of how not to undermine existing legal instruments, frameworks, and bodies. A conflict clause can be defined as “a clause intended to regulate the relation between the provisions of the treaty and those of another treaty or of any other treaty relating to the matters with which the treaty deals.”¹⁶⁶ In its current form, Article 4(3) of the 2019 Draft Text stipulates that the ILBI

shall be interpreted and applied in a manner that [respects the competences of and] does not undermine [existing] relevant legal instruments and frameworks and relevant global, regional and sectoral bodies, and that promotes coherence and coordination with those

instruments, frameworks and bodies, provided that they are supportive of and do not run counter to the objectives of the Convention and this Agreement.

The BBNJ negotiations are ongoing, which means that Article 4(3) of the 2019 Draft Text only presents the current proposal for a conflict clause. While Article 4(3) of the Draft Text might be subject to future change, it is noted that specific conflict clauses enjoy priority in application in comparison to the more general conflict rules in the VCLT.¹⁶⁷ The future relationship between the ILBI and the ATS would thus be primarily regulated by a future conflict clause in the ILBI, such as Article 4(3) of the Draft Text, and not by the general rules of the VCLT.

However, Article 4(3) of the Draft Text would not be the only relevant conflict clause, since Article VI of the Antarctic Treaty regulates the normative relationship between the Antarctic Treaty and high seas freedoms in the ATA.¹⁶⁸ When faced with two conflict clauses that are relevant for the normative relationship between two overlapping treaties, it was proposed that the later conflict clause ought to be the decisive one.¹⁶⁹ This would suggest that a future conflict clause in the ILBI, and not Article VI of the Antarctic Treaty, would determine the relationship between the ILBI and the ATS.

In addition, conflict clauses may also fulfill a “clarification function” and thereby facilitate “the application of [a] ... relevant treaty, its implementation, and consequently, its effectiveness in achieving its object and purpose.”¹⁷⁰ However, as cautioned by Matz-Lück, the degree to which conflict clauses can fulfill this function “depends to a considerable extent upon their wording and interpretation.”¹⁷¹ The wording of a future conflict clause in the ILBI will thus impact the extent to which such a clause will allow for clear guidance regarding the future normative and institutional relationship between the IBLI and existing legal instruments and frameworks for BBNJ, such as the ATS.

Conflict clauses can be distinguished based on whether they claim priority over or grant prevalence to other treaties.¹⁷² A second distinction is whether a conflict clause claims or grants priority in a “conditional” or “unconditional” manner.¹⁷³ Given its current wording, the first part of Article 4(3) of the 2019 Draft Text requires that the ILBI is “interpreted and applied in a manner that [respects the competences of and] does not undermine [existing] relevant legal instruments and frameworks and relevant global, regional and sectoral bodies, and that promotes coherence and coordination with those instruments, frameworks and bodies.” In so doing, Article 4(3) of the Draft Text would arguably not qualify as an unconditional conflict clause, as it would neither accord clear priority to the ILBI over existing instruments and frameworks, nor clearly state that the terms of existing instruments, frameworks, and bodies prevail over the ILBI.

For instance, the notion of “shall not undermine” would stipulate a condition that would require interpreting what exactly would amount to “undermining” existing instruments, frameworks, and bodies. Similarly, Article 4(3) of the 2019 Draft Text requires that the ILBI shall be interpreted and applied in a way that promotes, but not necessarily achieves, coherence and coordination between relevant instruments, frameworks, and bodies. The impression that Article 4(3) could leave room for the ILBI to deviate from existing instruments and frameworks can also be supported by the context of Article 4(1) of the Draft Text. Giving effect to the normative criterion of full consistency between the ILBI and the LOSC formulated in UNGA Resolution 72/249,¹⁷⁴ Article 4(1) of the 2019 Draft Text stipulates:

Nothing in this Agreement shall prejudice the rights, jurisdiction and duties of [s]tates under the Convention. This Agreement shall be interpreted and applied in the context of and in a manner consistent with the Convention.

This wording appears to require a higher level of compatibility between the ILBI and the LOSC, when compared to Article 4(3) of the Draft Text, which does not state that nothing in the ILBI shall prejudice the rights, jurisdiction, and duties of states under existing instruments and frameworks.

As a consequence of not requiring full consistency between the ILBI and existing instruments, frameworks, and bodies, Article 4(3) of the 2019 Draft Text would not grant automatic priority in application to the Antarctic Treaty, the Madrid Protocol, and CCAMLR, if the ILBI provides for substantively different regulation of bioprospecting in the Southern Ocean. Nor would Article 4(3) of the Draft Text grant clear priority to the ILBI over the different instruments of the ATS. Instead, one would, for instance, need to interpret whether potential monetary benefit-sharing obligations under the ILBI would undermine the ATS, which currently does not provide for monetary benefit-sharing obligations. As a second example, it would similarly be subject to interpretation whether more stringent obligations for in situ access in the ILBI, as compared to the ATS, would undermine the ATS. If one interpreted the criterion of “not to undermine” as stipulating a minimum standard, which was suggested as one interpretation,¹⁷⁵ more stringent obligations in the ILBI in terms of monetary benefit-sharing or in situ access would arguably not undermine the ATS. Given the “ambiguity” of the term “not to undermine,”¹⁷⁶ however, one could similarly argue the alternative.

Finally, the last part of Article 4(3) of the Draft Text could allow for more clarity, as it would subject the requirement of interpreting and applying the ILBI “in a manner that [respects the competences of and] does not undermine [existing] relevant legal instruments and frameworks and relevant global, regional and sectoral bodies, and that promotes coherence and coordination with those instruments, frameworks and bodies” to the condition that those instruments, frameworks, and bodies “are supportive of and do not run counter to the objectives of the Convention and this Agreement.” In other words, the ILBI could be interpreted and applied in a manner that, for instance, undermines an existing instrument, if the existing instrument in question were not supportive of and ran counter to the objectives of the LOSC and the ILBI. This could strengthen the normative position of the ILBI vis-à-vis existing legal instruments, frameworks, and bodies that are relevant to BBNJ.

In this context, it is noteworthy that some scholars have explicitly suggested strengthening the normative position of the ILBI vis-à-vis existing legal instruments and frameworks for BBNJ.¹⁷⁷ For instance, Mendelhall et al. cautioned that putting too much emphasis on the criterion of not to undermine “may be undermining the BBNJ process as a whole, by preventing the emerging agreement from contributing to the evolution of the ocean governance regime.”¹⁷⁸ However, delegations, inter alia, from Mexico, the Russian Federation, and the European Union (EU) during IGC III in 2019 proposed the deletion of the very last part of Article 4(3) of the Draft Text.¹⁷⁹ At the time of writing, it thus remains to be seen how the BBNJ delegations will ultimately conceptualize the normative and institutional integration of the ILBI within existing instruments, frameworks, and bodies for BBNJ, such as the ATS.

External Acceptance of the Antarctic Treaty System's Competence for Bioprospecting

As mentioned in the preceding, states are by virtue of the *pacta tertiis* principle not bound by treaties they have not consented to. This notwithstanding, the ATCPs' assertion of competence vis-à-vis the BBNJ process does not appear to be limited to state parties, as the statement proclaims that the ATS is “the competent framework within which to address the conservation and sustainable use of biodiversity in the Antarctic region.”¹⁸⁰ For states that are not a party to any of the ATS instruments, but that will become party to the ILBI, it is questionable whether the ATS would have any relevance to the regulation of bioprospecting in the Southern Ocean. This question relates to the debate on whether the Antarctic Treaty qualifies as an “objective regime,”¹⁸¹ which is a “controversial category linked to the law of treaties, according to which some kinds of treaties produce effects with regard to [s]tates not parties to it.”¹⁸² The question of whether the ATS would have any relevance for states that are not a party to any of the ATS instruments, but are a party to the ILBI, also relates to the broader question of external acceptance of the Antarctic Treaty (System), which was repeatedly raised at the United Nations in the form of the “Question of Antarctica” until 2005,¹⁸³ when the UNGA decided to “remain seized of the matter.”¹⁸⁴

Whether the Antarctic Treaty can, as an objective regime, bind nonparties has been discussed by scholars.¹⁸⁵ Recently, Wolfrum has argued that “neither the Antarctic Treaty or the Madrid Protocol, or the Recommendations of the ATCMs, create binding obligations vis-à-vis third states.”¹⁸⁶ However, Wolfrum has also suggested that “the world community has over twenty years accepted the activities of the Consultative Parties in Antarctica and has thus acquiesced to the latter, the general validity of the Antarctic regime as such, and the functions exercised by the consultative parties.”¹⁸⁷ Owing to space constraints, this article cannot discuss whether the Antarctic Treaty qualifies as an objective regime or whether the states not party to ATS instruments have in fact acquiesced to the ATS.

Instead, it suffices to note that the debate on whether the Antarctic Treaty qualifies as an objective regime, as well as the broader question of external acceptance of the ATS, could be reignited if the ILBI ultimately overlaps with the ATS and provides for conflicting regulation of bioprospecting. For example, a particular challenge for external acceptance of the ATS's competence to regulate bioprospecting may arise if the ILBI establishes monetary benefit-sharing obligations that are not currently provided for by the ATS.

Conclusion

Bioprospecting in the Southern Ocean is already subject to a complicated regulatory setting, consisting of the different instruments of the ATS as well as the LOSC and the CBD.¹⁸⁸ If adopted, the ILBI would, to the extent that it applies to the Southern Ocean, add an additional regulatory layer. After revisiting here the issue of bioprospecting in the Southern Ocean in the context of the BBNJ negotiations, the following points can be reiterated.

First, the extent of the potential overlap between the ILBI and the ATS will likely be subject to different interpretations, given the fundamentally opposing views regarding the validity of the maritime zones under national jurisdiction asserted from the Antarctic continent.¹⁸⁹ Crucially, clarifying the extent of ABNJ off the shore of Antarctica to which the ILBI would apply will require states to explicitly address the contentious question of the validity of the maritime zones under national jurisdiction asserted from the Antarctic continent.

Second, there is potential for substantive differences to arise in the regulation of bioprospecting between the ILBI and the ATS. Owing to space constraints, this point has been illustrated in the context of regulating *in situ* access to MGRs, as well as the non-monetary and monetary benefit-sharing obligations. An obvious caveat to the observation that the ILBI might differ from how the ATS regulates bioprospecting is of course that the BBNJ negotiations are ongoing, which means that the content of future provisions on MGRs remains an open question.

Third, the likely spatial overlap between the ILBI and the ATS, combined with the potential for substantive differences regarding the regulation of bioprospecting, begs the question of how the ILBI will normatively and institutionally relate to the ATS. For state parties of the ATS, which also become party to the ILBI, the question of which regime to comply with—the ILBI or the ATS—may arise. In addition, it is uncertain which decision-making fora will be competent to regulate bioprospecting activities in the Southern Ocean: the ATS (such as the ATCM or the CCAMLR Commission) or a future ILBI body.

Despite the assertion of competence by the ATCPs *vis-à-vis* the BBNJ process, this article has argued that unless the ILBI explicitly decides to regulate the relationship between the ILBI and the ATS (or exclude its applicability to the Southern Ocean altogether), the normative criterion of “not to undermine existing instruments, frameworks, and bodies” is the key to determining how the ILBI will normatively and institutionally relate to the ATS. In this respect, the fifth section offered some reflections on Article 4(3) of the 2019 Draft Text, which would, as a suggested conflict clause, operationalize the normative criterion of “not to undermine.” Importantly, at the time of writing, the BBNJ delegations are still in the process of finding a compromise in terms of how to integrate the ILBI normatively and institutionally within the existing instruments, frameworks, and bodies for BBNJ.

As highlighted in the introduction, Scott pointed in the context of the BBNJ process to a “potentially competitive relationship between the ATS and external regimes” for the regulation of bioprospecting.¹⁹⁰ To what extent the future relationship between the ILBI and the ATS will indeed prove to be competitive, will, *inter alia*, depend (i) on whether the ILBI and the ATS will overlap spatially in the Southern Ocean, (ii) on the degree to which the ILBI will substantively differ from the way the ATS currently regulates bioprospecting, and (iii) on how the BBNJ delegations will operationalize the normative requirement of the “not to undermine existing instruments, frameworks, and bodies” in a future conflict clause in the ILBI.

Finally, it can be recalled that the ATCPs’ assertion of competence *vis-à-vis* the BBNJ process does not appear to be limited to state parties of the ATS. Against this backdrop, this article has highlighted that the debate on whether the Antarctic Treaty qualifies as

an objective regime, as well as the broader question of external acceptance of the ATS by third states, could be reignited if the ILBI ultimately overlaps with the ATS and provides for conflicting regulation of bioprospecting.

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Notes

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2. U.N. Convention on the Law of the Sea, adopted 10 December 1982, entered into force 16 November 1994, 1834 *U.N.T.S.* 387 (hereinafter LOSC).
3. U.N. General Assembly Resolution 72/249 (24 December 2017), para. 1.
4. U.N. General Assembly Resolution 59/24 (17 November 2004), para. 73.
5. U.N. General Assembly Resolution 72/249, supra note 3, para. 1.
6. *Ibid.*, para. 3.
7. Draft Text of an Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction, U.N. Doc. A/CONF.232/2019/6 (17 May 2019).
8. U.N. General Assembly Resolution 72/249, supra note 3, para. 2.
9. Margaret A. Young and Andrew Friedman, “Biodiversity Beyond National Jurisdiction: Regimes and Their Interaction,” (2018) 112 *American Journal for International Law Unbound* 123–128, 123.
10. Convention on Biological Diversity, adopted 5 June 1992, entered into force 29 December 1993, 1760 *U.N.T.S.* 79 (hereinafter CBD).
11. The CBD applies broadly to “components of biological diversity” in areas within national jurisdiction (Article 4(a) CBD). In contrast, in ABNJ the CBD is only applicable to “processes and activities” conducted under the “jurisdiction or control” of its state parties (Article 4(b) CBD) and does not apply to components of biological diversity as such; see further Rüdiger Wolfrum and Nele Matz, “The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity,” (2000) 4 *Max Planck Yearbook of United Nations Law* 445–480, 461–462.
12. Erik J. Molenaar, “Managing Biodiversity in Areas beyond National Jurisdiction,” (2007) 22 *International Journal of Marine and Coastal Law* 89–124, 93.

13. *Ibid.*, 95.
14. The Antarctic Treaty, adopted 1 December 1959, in force 23 June 1961, 402 *U.N.T.S.* 71 (hereinafter Antarctic Treaty).
15. Convention on the Conservation of Antarctic Marine Living Resources, adopted 20 May 1980, in force 7 April 1982, 1329 *U.N.T.S.* 48 (hereinafter CCAMLR).
16. Protocol on Environmental Protection to the Antarctic Treaty, adopted 4 October 1991, in force 14 January 1998, 30 *I.L.M.* 1461 (hereinafter Madrid Protocol).
17. Alex G. Oude Elferink, "Exploring the Future of the Institutional Landscape of the Oceans Beyond National Jurisdiction," (2019) 28(3) *Review of European, Comparative and International Environmental Law* 236–243, 242.
18. Joanna Mossop, "Marine Bioprospecting," in Donald R. Rothwell et al., eds., *The Oxford Handbook of the Law of the Sea* (Oxford University Press, 2015), 825–842, 825.
19. Rothwell, *supra* note 1, 208.
20. *Ibid.*, 208–209.
21. Karen N. Scott, "Scientific Rhetoric and Antarctic Security," in Alan D. Hemmings, Donald R. Rothwell, and Karen N. Scott, eds., *Antarctic Security in the Twenty-First Century, Legal and Policy Perspectives* (Routledge, 2012), 284–306, 296.
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23. See Silja Vöneky and Sange Addison-Agyei, "Antarctica," in Rüdiger Wolfrum, ed., *The Max Planck Encyclopedia of Public International Law*, online ed. (2011), available at <https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1244?rskey=cndP8l&result=1&prd=MPIL> (last accessed 15 February 2020).
24. Anthony Aust, *Handbook of International Law* (Cambridge University Press, 2005), 356.
25. The claimant states are Argentina, Australia, Chile, United Kingdom, Norway, New Zealand, France; see further, Vönkey and Addison-Agyei, *supra* note 23, para. 6 et seq.
26. See Donald R. Rothwell, "Sovereignty and the Antarctic Treaty," (2010) 46(1) *Polar Record* 17–20, 18.
27. John Hanessian, "The Antarctic Treaty 1959," (1969) 9 *International and Comparative Law Quarterly* 436–475, 470 [emphasis in original].
28. Rothwell, *supra* note 26, 19.
29. Antarctic Treaty, *supra* note 14, Article I.
30. *Ibid.*, Article II.
31. Rothwell, *supra* note 1, 209.
32. CCAMLR, *supra* note 15, Article II(1).
33. Rothwell, *supra* note 1, 209.
34. Convention on the Regulation of Antarctic Mineral Resource Activities, adopted 2 June 1988, not entered into force, 27 *I.L.M.* 868 (hereinafter CRAMRA).
35. Davor Vidas, "Emerging Law of the Sea Issues in the Antarctic Maritime Area: A Heritage for the New Century?," (2000) 31(1–2) *Ocean Development and International Law* 197–222, 210.
36. Madrid Protocol, *supra* note 16, Article 2.
37. *Ibid.*
38. *Ibid.*, Article 7; see further, Rothwell, *supra* note 26, 19.
39. Constance M. Johnson, "The Relevance of the Southern Ocean to the Development of a Global Regime for Marine Areas Beyond National Jurisdiction—An Uncommon Commons," (2017) 32 *International Journal of Marine and Coastal Law* 709–732, 715–716.
40. *Ibid.*, 712.
41. See, e.g., Tullio Scovazzi, "The Antarctic Treaty System and the New Law of the Sea," in Francesco Francioni and Tullio Scovazzi, eds., *International Law for Antarctica*, 2nd ed. (Kluwer Law International, 1996), 377–394, 387.
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44. Francis M. Auburn, *Antarctic Law and Politics* (Indiana University Press, 1982), 130.

45. See, e.g., Karen N. Scott, "Marine Scientific Research and the Southern Ocean: Balancing Rights and Obligations in a Security-Related Context," (2008) 6 *New Zealand Yearbook of International Law* 111–134, 116.
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47. Karen N. Scott and David L. VanderZwaag, "Polar Oceans and Law of the Sea," in Donald R. Rothwell et al., eds., supra note 18, 724–751, 741.
48. *Ibid.*, 741; Johnson, supra note 39, 712.
49. May 2019 Draft Text, supra note 7, Article 3.
50. *Ibid.*, Article 1(4).
51. For an overview of the regime of the high seas and the Area, see Yoshifumi Tanaka, *The International Law of the Sea*, 3rd ed. (Cambridge University Press, 2015), 186 et seq.
52. LOSC, supra note 2, Article 86.
53. *Ibid.*, Article 1(1)(1).
54. Johnson, supra note 39, 731; see also Report of the Preparatory Committee established by General Assembly Resolution 69/292: Development of an International Legally Binding Instrument under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction, U.N. Doc. A/AC.287/2017/PC.4/2 (31 July 2017).
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64. Johnson, supra note 39, 715.
65. *Ibid.*, 716; see further, Donald R. Rothwell, "A Maritime Analysis of International Law Regimes in Antarctica and the Southern Ocean," (1994) 15 *Australian Yearbook of International Law* 155–181, 158.
66. Joyner, supra note 55, 311; see also Christopher C. Joyner, "The Antarctic Treaty and the Law of the Sea: Fifty Years On," (2010) 46 (1) *Polar Record* 14–17, 16.
67. Scott, supra note 45, 120.
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70. Johnson, *supra* note 39, 716.
71. *Ibid.*, 715–716, for an overview, see Joyner, *supra* note 66, 15–16.
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73. *Ibid.*; see further, Karen N. Scott, “Managing Sovereignty and Jurisdictional Disputes in the Antarctic: The Next Fifty Years,” (2009) 20(1) *Yearbook of International Environmental Law* 3–40, 15 et seq; Stephens, *supra* note 63, 42 et seq.
74. Johnson, *supra* note 39, 715; see further, Rothwell, *supra* note 65, 158.
75. See, Stephens, *supra* note 63, 443.
76. Johnson, *supra* note 39, 716.
77. For an overview of the differing views among claimant and nonclaimant states, see Stephens, *supra* note 63, 443.
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80. Scott and VanderZwaag, *supra* note 47, 739; Stephens, *supra* note 63, 443.
81. Scott, *supra* note 73, 15.
82. *Ibid.*, 22.
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88. ATCM Resolution 6 (2013), *supra* note 85.
89. Mossop, *supra* note 18, 840.
90. Information Paper 29, *supra* note 86, 3–4.
91. Final Report of the Thirty-second Antarctic Treaty Consultative Meeting (ATCM XXXII, Baltimore, 2010), para. 317.
92. Johnson, *supra* note 39, 729.
93. ATCM Resolution 7 (2005) Biological Prospecting (ATCM XXVIII—CEP VIII, Stockholm); ATCM Resolution 9 (2009) Collection and Use of Antarctic Biological Material (ATCM XXXII—CEP XII, Baltimore); and ATCM Resolution 6 (2013), *supra* note 85.
94. Johnson, *supra* note 39, 727.
95. Gaute Voigt-Hanssen, “Current ‘Light’ and ‘Heavy’ Options for Benefit-Sharing in the Context of the United Nations Convention on the Law of the Sea,” (2018) 33 *International Journal of Marine and Coastal Law* 683–705, 685.
96. See Robin M. Warner, “Conserving Marine Biodiversity in Areas Beyond National Jurisdiction: Co-Evolution and Interaction with the Law of the Sea,” in Donald R. Rothwell et al., eds., *supra* note 18, 752–776, 765.
97. Voigt-Hanssen, *supra* note 95, 685.
98. President’s Aid to Negotiations, U.N. Doc. A/CONF.232/2019/1 (3 December 2018), 12–21.
99. See Dagmar Lohan and Sam Johnson, Bioprospecting in Antarctica (UNU-IAS Report, 2005), 17 et seq.
100. For an overview of the discussions during IGC III, see Tallash Kantai et al., “Summary of the Third Session of the Intergovernmental Conference (IGC) on the Conservation and Sustainable Use of Marine Biodiversity of Areas Beyond National Jurisdiction: 19–30 August 2019,” (2019) 25(218) *Earth Negotiations Bulletin*, 1–24.
101. Arianna Broggiato et al., “*Mare Geneticum*: Balancing Governance of Marine Genetic Resources in International Waters,” (2018) 33 *The International Journal of Marine and Coastal Law* 3–33, 14.
102. *Ibid.*

103. Tallash Kantai et al., “BBNJ IGC-3 Highlights: Friday, 23 August 2019,” (2019) 25(213) *Earth Negotiations Bulletin* 1–2, 1.
104. *Ibid.*
105. See Petra Drankier et al., “Marine Genetic Resources in Areas Beyond National Jurisdiction: Access and Benefit-Sharing,” (2012) 27 *International Journal of Marine and Coastal Law* 375–433, 417–418.
106. Antarctic Treaty, *supra* note 14, Article 2.
107. Jabour and Nicol, *supra* note 1, 100.
108. ATCM Resolution 9 (2009), *supra* note 93; see further Christopher C. Joyner, “Bioprospecting as a Challenge to the Antarctic Treaty,” in Alan D. Hemmings, Donald R. Rothwell, and Karen N. Scott, eds., *supra* note 21, 197–214, 205.
109. Antarctic Treaty, *supra* note 14, Article II.
110. See Roser Puig-Marcó, “Access and Benefit-Sharing of Antarctica’s Biological Material,” (2014) 17 *Marine Genomics* 73, 74–75.
111. See Drankier et al., *supra* note 105, 418.
112. For an overview, see Lohan and Johnson, *supra* note 99, 17–18.
113. *Ibid.*
114. Puig-Marcó, *supra* noted 110, 75; Drankier et al., *supra* note 105, 418.
115. ATCM Resolution 9 (2009), *supra* note 93.
116. Drankier et al., *supra* note 105, 419; see also Puig-Marcó, *supra* note 110, 75.
117. ATCM Decision 10 (2005) (ATCM XXVIII—CEP VIII, Stockholm).
118. Information Paper 29, *supra* note 86, 13; see further ATCM Decision 4 (2012) (ATCM XXXV—CEP XV, Hobart) and ATCM Decision 6 (2013) (ATCM XXXVI—CEP XVI, Brussels).
119. Information Paper 29, *supra* note 86, 14.
120. Puig-Marcó, *supra* note 110, 75.
121. Lohan and Johnson, *supra* note 99, 18.
122. See Kantai et al., *supra* note 103, 1.
123. *Ibid.*
124. See Statement by the President of the Conference at the Closing of the First Session, U.N. Doc. A/CONF.232/2018/7 (20 September 2018), 23.
125. *Ibid.*
126. President’s Aid to Negotiations, *supra* note 98, 17.
127. Statement by the President, *supra* note 124, 23.
128. Statement by the President of the Conference at the Closing of the Second Session, U.N. Doc. A/CONF.232/2019/5 (18 April 2019), 5.
129. Tallash Kantai et al., “BBNJ IGC-2 Highlights: Monday, 25 March 2019,” (2019) 25(186) *Earth Negotiations Bulletin* 1–2, 2.
130. *Ibid.*
131. Kantai et al., *supra* note 100, 8.
132. Jabour and Nicol, *supra* note 1, 100.
133. ATCM Resolution 7 (2005), *supra* note 93; ATCM Resolution 9 (2009), *supra* note 93; ATCM Resolution 6 (2013), *supra* note 85.
134. Johnson, *supra* note 39, 727.
135. Jabour and Nicol, *supra* note 1, 104.
136. See Puig-Marcó, *supra* note 110, 75.
137. *Ibid.*; Julia Jabour, “The Potential to Regulate Bioprospecting for Marine Genetic Resources: Two Case Studies,” in Robin M. Warner and Stuart B. Kaye, eds., *Routledge Handbook of Maritime Regulation and Enforcement* (Routledge, 2016), 324–341, 333; Information Paper 29, *supra* note 86, 17.
138. Working Paper 13 (Netherlands) Report of the ATCM Intersessional Contact Group to Examine the Issue of Biological Prospecting in the Antarctic Treaty Area (ATCM XXXIII, Punta del Este, 2010), 5.
139. *Ibid.*

140. Information Paper 29, *supra* note 86, 17; Julia Jabour, “Biological Prospecting: The Ethics of Exclusive Reward from Antarctic Activity,” (2010) 10(1) *Ethics in Science and Environmental Politics* 19–29, 23; Drankier et al., *supra* note 105, 420.
141. Lohan and Johnson, *supra* note 99, 18.
142. Johnson, *supra* note 39, 718, footnote 41.
143. Procedure upon Receiving Invitations from the U.N. Secretariat (ATCM XL—CEP XX, Beijing, 2017) [emphasis added].
144. Final Report of the Forty-first Antarctic Treaty Consultative Meeting (ATCM XLI, Buenos Aires, 2018), para. 51.
145. *Ibid.*, para. 52 [emphasis added].
146. Vidas, *supra* note 35, 210 et seq.
147. *Ibid.*, 211–214.
148. *Ibid.*, 214.
149. Scott and VanderZwaag, *supra* note 47, 741.
150. *Ibid.*
151. Johnson, *supra* note 39, 719.
152. See generally Budislav Vukas, “Treaties, Third-Party Effect,” in Rüdiger Wolfrum, ed., *Max Planck Encyclopedia of Public International Law*, online ed. (2011), available at <https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1450?rskey=yemPfXT&result=1&prd=OPIL> (last accessed 15 February 2020).
153. Joyner, *supra* note 66, 15; Johnson, *supra* note 39, 717.
154. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, adopted 4 August 1995, entered into force 11 December 2001, 2167 *U.N.T.S.* 88.
155. For a discussion, see James Harrison, *Making the Law of the Sea, A Study in the Development of International Law* (Cambridge University Press, 2011), 107, with further references.
156. Donald R. Rothwell et al., “Charting the Future for the Law of the Sea,” in Donald R. Rothwell et al., eds., *supra* note 18, 888–912, 909.
157. See further Anthony Aust, “Pacta Sunt Servanda,” in Rüdiger Wolfrum, ed., *Max Planck Encyclopedia of Public International Law*, online ed. (2007), available <https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1449?rskey=02FMGz&result=1&prd=OPIL> (last accessed 15 February 2020).
158. On the notion of conflicts between treaties see, e.g., Nele Matz-Lück, “Treaties, Conflicts between,” in Rüdiger Wolfrum, ed., *The Max Planck Encyclopedia of Public International Law*, online ed. (2010), available at <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1485?rskey=U8OWgC&result=3&prd=EPIL#> (last accessed 15 February 2020).
159. For a discussion of the institutional design of the ILBI, see Oude Elferink, *supra* note 17.
160. U.N. General Assembly Resolution 72/249, *supra* note 3, para. 6.
161. *Ibid.*, para. 7.
162. Johnson, *supra* note 39, 719; U.N. Ocean Division for Ocean Affairs and the Law of the Sea, “Indicative List of Regional Treaties,” available at https://www.un.org/Depts/los/biodiversity/prepcom_files/Indicative_list_of_regional_treaties.pdf (last accessed 15 February 2020).
163. Johnson, *supra* note 39, 719.
164. Pierre-Marie Dupuy and Jorge E. Viñuales, *International Environmental Law*, 2nd ed. (Cambridge University Press, 2018), 246; see also Zoe Scanlon, “The Art of ‘Not Undermining’: Possibilities Within Existing Architecture To Improve Environmental Protections in Areas Beyond National Jurisdiction,” (2017) 75(1) *ICES Journal of Marine Science* 405–416, 406.
165. Dupuy and Viñuales, *supra* note 164, 246.

166. International Law Commission, "Draft Articles on the Law of Treaties with Commentaries," (1966) Vol. II *Yearbook of the International Law Commission* 187–274, 214.
167. VCLT, supra note 60; Wolfrum and Matz, supra note 61, 122; Alan Boyle, "Relationship Between International Environmental Law and Other Branches of International Law," in Daniel Bodansky, Jutta Brunnée, and Ellen Hey, eds., *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2008), 126–146, 132.
168. For a discussion of Article VI Antarctic Treaty, see Federica Mucci and Fiammetta Borgia, "The Legal Regime of the Antarctic," in David J. Attard, Malgosia Fitzmaurice, and Norman A. Martínez Gutiérrez, eds., *The IMLI Manual on International Maritime Law: Volume I: The Law of the Sea* (Oxford University Press, 2014), 484–508, 497–498.
169. This point was made by Sadat-Akhavi for a situation where two conflict clauses in two treaties concur, i.e., where both clauses state that they are without prejudice to the other treaty; Seyed A. Sadat-Akhavi, *Methods for Resolving Conflicts Between Treaties* (Martinus Nijhoff, 2003), 96–97.
170. Nele Matz-Lück, "Treaties, Conflict Clauses," in Rüdiger Wolfrum, ed., *The Max Planck Encyclopedia of Public International Law*, online ed. (2006), available at <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1466?rskey=U8OWgC&result=2&prd=EPIL#> (last accessed 15 February 2020), para. 5.
171. *Ibid.*
172. International Law Commission, *Fragmentation of International Law: Difficulties arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law*, U.N. Doc. A/CN.4/L.682 (13 April 2006), para. 267 et seq.
173. Sadat-Akhavi, supra note 169, 89 et seq.
174. Note that Hubert and Craik already pointed to a potential difference between the normative criterion of full consistency with the LOSC, on the one hand, and not to undermine existing instruments, frameworks, and bodies, on the other, in the context of UNGA Resolution 72/249; Anna-Maria Hubert and Neil Craik, "Towards Normative Coherence in the International Law of the Sea for the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction," (2018), available at <https://site.uit.no/nclos/2018/02/01/towards-normative-coherence-in-the-international-law-of-the-sea-for-the-conservation-and-sustainable-use-of-marine-biological-diversity-of-areas-beyond-national-jurisdiction> (last accessed 15 February 2020).
175. Dupuy and Viñuales, supra note 164, 246; Scanlon similarly notes that on one interpretation, the "[criterion of] 'not undermining' a legal instrument might ordinarily suggest a requirement to not undermine the obligations in that instrument," while arguing that the notion of not to undermine could have a different meaning when applied to existing bodies and their mandates; Scanlon, supra note 164, 406.
176. Dupuy and Viñuales, supra note 164, 246.
177. Young and Friedman, supra note 9, 128.
178. Elizabeth Mendenhall et al., "A Soft Treaty, Hard to Reach: The Second Inter-Governmental Conference for Biodiversity Beyond National Jurisdiction," (2019) 108 *Marine Policy*, 2019, available at <https://www.sciencedirect.com/science/article/pii/S0308597X19303094?via%3Dihub> (last accessed 15 February 2020), 3, referencing Young and Friedman, supra note 9.
179. Tallash Kantai et al., "BBNJ IGC-3 Highlights: Tuesday, 20 August 2019," (2019) 25(210) *Earth Negotiations Bulletin* 1–2, 1.
180. Procedure upon Receiving Invitations from the U.N. Secretariat, supra note 143 [emphasis added].
181. See Bruno Simma, "The Antarctic Treaty as a Treaty Providing for an Objective Regime," (1986) 19 *Cornell International Law Journal* 189–209.
182. Carlos F. de Casadevante Romani, "Objective Regime," in Rüdiger Wolfrum, ed., *Max Planck Encyclopedia of Public International Law*, online ed. (2010), available at <https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1466?rskey=U8OWgC&result=2&prd=EPIL#> (last accessed 15 February 2020), para. 5.

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183. See Peter J. Beck, “Antarctica and the United Nations,” in Klaus Dodds, Alan D. Hemmings, and Peder Roberts, eds., *Handbook on the Politics of Antarctica* (Edward Elgar Publishing, 2017), 255–268, 255 et seq.
 184. U.N. General Assembly Resolution 60/47 (8 December 2005), para. 5; see further *ibid.*, 264.
 185. For the view favoring the binding effect of the Antarctic Treaty on nonparties, see Malcolm N. Shaw, *International Law*, 8th ed. (Cambridge University Press, 2017), 399; *contra* Hanessian, *supra* note 27, 470; Gillian D. Triggs, “The Antarctic Treaty System: Some Jurisdictional Problems,” in Gillian D. Triggs, ed., *The Antarctic Treaty Regime: Law Environment and Resources* (Cambridge University Press, 1989), 88–109, 89.
 186. Rüdiger Wolfrum, “Common Interest and Common Heritage in Antarctica,” in Klaus Dodds, Alan D. Hemmings, and Peder Roberts, eds., *supra* note 183, 142–151, 146.
 187. *Ibid.*, 149.
 188. Rothwell, *supra* note 1, 208.
 189. Johnson, *supra* note 39, 715.
 190. Scott, *supra* note 21, 296.