

# Governance of MGRs in ABNJ and Interests of Developing States: A Move Away from Scientific Colonialism? – Opinio Juris

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## 29 Mar Governance of MGRs in ABNJ and Interests of Developing States: A Move Away from Scientific Colonialism?

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On the 19th of June 2023 State delegates meeting at the UN adopted a global treaty on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction [<https://documents.un.org/doc/undoc/ltd/n23/177/28/pdf/n2317728.pdf?token=HARu5yIOnABf8Jizxu&fe=true>] (ABNJ) – also known as the BBNJ treaty – concluding the more-than-a-decade-long negotiations. The adoption of the BBNJ treaty is considered as a triumph [<https://carnegieendowment.org/2023/03/08/high-seas-treaty-is-extraordinary-diplomatic-achievement-pub-89228>] for diplomacy, particularly at a time when multilateralism is under sustained pressure.. The BBNJ treaty deals with four pillar issues, namely: access, use, and benefit sharing of marine genetic resources (MGRs); adoption of area-based management tools, including marine protected areas; environmental impact assessments; and capacity building and the transfer of marine technology. While several issues of special concern for developing States were debated during the BBNJ negotiations, the most polarizing issue having a North–South dimension related to the governance of MGRs, which are defined as ‘any material of marine plant, animal, microbial or other origin containing functional units of heredity of actual or potential value’ (BBNJ treaty, Art 1(8)). Highlighting the core debatable issues during the negotiations, this blog post discusses how and to what extent the BBNJ treaty addresses the interests of developing States relating to MGRs.

### Debatable Issues Relating to MGRs During the Negotiations

The exploitation of MGRs in ABNJ is of increasing interest for the pharmaceutical, food, cosmetics and other industries, and there is high potential [<https://www.sciencedirect.com/science/article/abs/pii/S0308597X08000985>] for such resources to be commercialized. Developed States have particular interest in bioprospecting and possess most of the technical capacity to access, research, and utilize MGRs found in ABNJ. Indeed, a few developed States account for 90% of patents [<https://bookdown.org/poldham/valuingthedeep/>] related to MGRs. Developing States consider this to be an act of ‘biopiracy’ [<https://pubmed.ncbi.nlm.nih.gov/11973830/>] or

'scientific colonialism' [<https://www.journals.uchicago.edu/doi/full/10.1086/508502>]. Accordingly, during the BBNJ negotiations, developing States strongly advocated that MGRs in ABNJ to be considered the common heritage of mankind (CHM) administered by an international body that ensures a fair and equitable sharing of benefits arising from their utilization – a regime identical [<https://www.mdpi.com/2071-1050/13/14/7993>] to the utilization of mineral resources of the deep seabed. On the other hand, developed States opposed the legal status of MGRs as a CHM and advanced two lines of arguments. First, they argued [[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4739223](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4739223)] that access and use of MGRs in ABNJ is part of the freedom of high seas, specifically the freedom of marine scientific research, and that research and innovation should not be stifled by burdensome rules on access and benefit-sharing. Second, and alternatively, they argued [<https://www.sciencedirect.com/science/article/pii/S0308597X19308218?via%253Dihub>] for a transaction-based approach to access and benefit-sharing like the regime under the Convention on Biological Diversity [<https://www.cbd.int/doc/legal/cbd-en.pdf>] (CBD) and its Nagoya Protocol on Access to Genetic Resources [<https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>] (NP). This latter approach was however problematic as there is not a legally recognized 'provider' of MGRs in ABNJ entitled to prior informed consent and to share the benefits from utilization of MGRs through a mutually agreed bilateral arrangements as required under the CBD and NP. Consequently, the negotiations later shifted focus towards a multilateral governance and benefit-sharing system based on activities of collection, research, and development.

The other major point of contention throughout the BBNJ negotiations related to the modalities of benefit sharing. While developing States demanded both monetary (in the event of commercialization of a product derived from MGRs) and non-monetary forms of benefit-sharing, developed States argued against any form of monetary benefit-sharing. All these disagreements have somehow settled during the final stages of the negotiations and Part II of the BBNJ treaty offers compromise provisions on the governance of MGRs.

### **MGRs under the BBNJ Treaty and Interests of Developing States**

The BBNJ treaty recognizes both the principles of the freedom of the high seas and the CHM under article 7, but it does not clarify the relationship between the two or their implications for the governance of MGRs. Rather than attempting to settle the dispute as to which principle should govern MGRs, the treaty provides specific rules on collection, use, and benefit-sharing of MGRs that strike a balance between the objectives of fair and equitable benefit-sharing and capacity building, on the one hand, and generation of scientific knowledge and technological innovations, on the other (Art. 9(a-c)). Accordingly, the BBNJ treaty adopted a notification-based approach of governance that requires States to be transparent about the collection and utilization of MGRs in ABNJ and to share benefits from their utilization in a fair and equitable manner. According to this approach, activities with respect to MGRs in ABNJ can be carried out by all Parties, irrespective of their geographical location, and by natural or juridical persons under their jurisdiction, based on a notification rather than a permit system (Art 11(1–5)). A Clearing-House Mechanism has been created as a centralized open-access platform for notification and exchange of scientific and other information, including collection, utilization, and commercialization of MGRs (Art 51). The notification system applies both to MGRs collected in the sea (*in situ*) and those held *ex situ* (such as in gene banks) and digital sequence information (DSI) on MGRs (*ex silico*) (Art 12).

The details of the types of information that must be notified to the Clearing-House Mechanism are stated under article 12(2–8) and constitute two main categories, namely notification relating to collection of MGRs and notification relating to utilization, including commercialization, of MGRs. The first category of notification (i.e. collection of MGRs), includes pre-collection and post-collection notifications. Pre-collection notifications should be submitted six months or as early as possible prior to the collection *in situ* of MGRs, and such information include, *inter alia*: the nature and objectives under which the collection is carried out; the MGRs to be targeted or collected, and the purposes for which such resources will be collected; the geographical areas in which the collection is to be undertaken; summary of the method and means to be used for collection; the expected date of first appearance and final departure of the research vessels, or deployment of the equipment and its

removal; the name(s) of the sponsoring institution(s) and the person in charge of the project; opportunities for scientists of all States, in particular scientists from developing States, to be involved in or associated with the project; and the extent to which it is considered that States that may need and request technical assistance, in particular developing States, should be able to participate or to be represented in the project (see Art 12(2–4)). Upon the notification of these pre-collection information, the Clearing-House Mechanism will generate a standardized batch identifier so that MGRs collected in ABNJ can be subsequently identified as such (Art 12(3)).

After the collection of MGRs *in situ* – as soon as possible, but no later than one year from the collection – States are required to submit a report detailing the geographical area where MGRs were collected and the findings from the activity undertaken; the location where all MGRs collected *in situ* are or will be deposited; and the repository or database where DSI on MGRs is or will be deposited (see Art 12(5)). When MGRs are utilized, States are required to notify the location where the results of utilization, such as publications, granted patents, and developed products, can be found; the location where the original sample is held; the modalities envisaged for access to MGRs and DSI on MGRs being utilized; and if the MGRs are marketed, information on sales of relevant products and any further developments (Art 12(8)).

Regarding benefit sharing, Article 11(6) provides the core principle stating that activities with respect to MGRs in ABNJ should be conducted ‘in the interests of all States and for the benefit of all humanity, particularly for the benefit of advancing the scientific knowledge of humanity and promoting the conservation and sustainable use of marine biological diversity, *taking into particular consideration the interests and needs of developing States*’. Article 14 further emphasizes that the benefits arising from activities with respect to MGRs and DSI on MGRs of ABNJ ‘shall be shared in a fair and equitable manner’, and in this respect, it recognizes both non-monetary and monetary forms of benefit sharing. Non-monetary benefits include: access to samples and sample collections and DSI; open access to findable, accessible, interoperable and reusable (FAIR) scientific data; transfer of marine technology; capacity-building, including by financing research programmes and partnership opportunities for researchers in developing States, taking into account the special circumstances of small island developing States and of least developed States; increased technical and scientific cooperation, in particular with scientists from and scientific institutions in developing States (Art 14(2)). The list is not exhaustive, and the Conference of the Parties (CoP) is mandated to determine other forms of non-monetary benefits (Art 14(2(h))).

The notification scheme is essential to address the interests of developing States. The requirement that notifications should be made both prior to expeditions and after collection of MGRs would allow non-monetary benefits to be shared at the various phases throughout the value chain. While a pre-cruise notification scheme would create opportunities [\[https://site.uit.no/nclos/wp-content/uploads/sites/179/2021/01/NCLOS-Blog-Prip-New-Treaty.pdf\]](https://site.uit.no/nclos/wp-content/uploads/sites/179/2021/01/NCLOS-Blog-Prip-New-Treaty.pdf) for participation of scientists from developing States in research projects and capacity building, a post-collection notification will facilitate the sharing of benefits from the utilization of the collected materials, such as access to samples and scientific data. Indeed, the BBNJ treaty stipulates that opportunities for such access ‘on fair and most favorable terms, including on concessional and preferential terms’ may be provided to researchers and research institutions from developing States (Art 14(4)). However, access to MGRs and DSI on MGRs in the repositories and databases may be subject to ‘reasonable conditions’, including, *inter alia*, reasonable costs associated with maintaining the relevant gene bank, biorepository, or database in which the sample, data or information is held, as well as costs associated with providing access to the MGRs, data or information (Art 14(4)). In the absence of any standard of reasonableness, there is no bar for developed States from making these conditions onerous to developing States.

The BBNJ treaty also recognizes a fair and equitable sharing of monetary benefits from the utilization and commercialization of MGRs and DSI on MGRs and requires that such payments shall be made through the special fund established under article 52 (Art 14(5–7)). Nonetheless, no agreement has been reached on the modalities for sharing of monetary benefits and the determination of such modalities is deferred for future decision by the CoP (Art 14(7)). The treaty creates two main sources of

finance for the special fund. First, it obligates all developed States Parties to contribute a fixed amount equal to half of (and in addition to) their assessed contribution to the treaty's administrative budget (Art. 14(6)). Since it is unclear when MGRs and DSI from ABNJ will be commercialized and provide monetary benefits, this mandatory guaranteed funding is important in providing an immediate source of finance for developing States after the treaty enters into force (D Bodanski, 2024). Second, and when MGRs are commercialized, the CoP will adopt appropriate modalities for monetary benefit sharing, that will replace the Parties' determined contribution, which may include milestone payments, royalties on the commercialization of products, or a tiered fee paid periodically based on a diversified set of indicators measuring the aggregate level of activities by a State party (Art. 14(7)). However, adoption of these modalities requires a three-fourth majority vote and Parties have the right to opt out of them for up to four years upon their unilateral declaration (Art. 14(8)). Moreover, all forms of monetary benefits provided to developing States will not go into their general treasury; rather, they must be used for the conservation and sustainable use of marine biodiversity in ABNJ (Arts. 14(5) and 52(6)).

Finally, the BBNJ treaty established a specialized body, an access and benefit sharing committee, which serve as a means for establishing guidelines for benefit sharing, providing transparency, and ensuring a fair and equitable sharing of both monetary and non-monetary benefits (Art 15(1)). The Committee has an advisory role to the CoP and may make recommendations on several matters relating to MGRs, including a code of conduct for activities with respect to MGRs and DSI on MGRs; modalities, rates, or mechanisms for the sharing of monetary benefits; and procedures for monitoring and transparency of activities relating to MGRs and DSI on MGRs in connection with notifications through the Clearing-House Mechanism (Arts 15(3) and 16 (1)). The composition of the Committee provides opportunities for developing States to safeguard their interests.

**\*\*Conclusion: Effective Implementation will Determine the Real Impact \*\***

The BBNJ negotiations on the governance of MGRs were characterized by fundamentally opposing views between developed and developing States who respectively advocated for the application of the principle of high seas and the CHM. The BBNJ treaty does not make a clear choice from the two principles, but it rather follows a modified dual approach: freedom of the sea applies with respect to access and collection of MGRs subject to notification, while the benefits arising from such utilization would be shared to all States in a fair and equitable manner. As such, the treaty creates an approach of governance of MGRs that rejects the monopoly of developed States over access and utilization of MGRs and that allows both a *de facto* equal participation of developing States in such activities and offers a range of options for monetary and non-monetary benefit sharing. However, the notification-based approach is largely based on the trust (expectation) that States will release full and accurate information regarding their collection and utilization of MGRs, which is not always the case. In the absence of effective monitoring mechanism to ensure the accuracy of the information submitted by States, this trust-based regime may remain fragile in adequately protecting the interest of developing States. Save this general shortcoming, the governance of MGRs in the BBNJ treaty largely appears to be in the interest of developing States, but effective implementation will determine its real impact in adequately addressing the interests of developing States. Moreover, the negotiations relating to MGRs are still unfinished since the BBNJ treaty left many details for future determination by the CoP. Therefore, developing States should be vigilant to seize the opportunity at the CoP and to play a significant role in addressing remaining doubts relating to developing fair and equitable benefit sharing criteria, selection of appropriate modalities for sharing of monetary benefits, and other important issues in their own favor.

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