1. CITES and the BBNJ Treaty: Some Reflections – Souvik S. Guha (NCLOS Blog, UiT Norway) – April 18, 2023. Summary: A legal commentary examining overlaps between the CITES regime and the BBNJ Treaty's provisions on marine genetic resources. It notes that under BBNJ, any collection of MGRs in the high seas must be notified to the new Clearing-House Mechanism (CHM) at least six months in advance[1]

[https://site.uit.no/nclos/2023/04/18/cites-and-the-bbnj-treaty-some-

reflections/#:-:text=clearing.important%20as%20it%20would%20allow]. This advance notification to the CHM could help reconcile BBNJ's access/benefit-sharing measures with CITES trade permits by giving authorities time to coordinate. The author suggests that close cooperation between the BBNJ CHM and CITES processes will be vital to avoid conflicts and ensure both regimes apply effectively to specimens taken from areas beyond national jurisdiction. *Link*: NCLOS Blog

[https://site.uit.no/nclos/2023/04/18/cites-and-the-bbnj-treaty-some-reflections/] (open access).

2. "How does the new BBNJ Agreement regulate access to and benefit-sharing of MGRs at deep-sea hydrothermal vents?" – Dr. Sarah Lothian (ECO Law Blog, Univ. of Edinburgh) – June 1, 2023. Summary: A detailed blog post by Sarah Lothian exploring the BBNJ Agreement's access and benefit-sharing (ABS) regime through the lens of hydrothermal vent research. It explains that any in-situ collection of MGRs in ABNJ triggers a prior notification obligation: collectors must notify the BBNJ Clearing-House Mechanism at least 6 months before the activity[2] [https://blogs.ed.ac.uk/ecolaw/2023/06/01/how-does-the-new-bbnj-agreement-regulate-access-to-

and-benefit-sharing-of-marine-genetic-resources-at-deep-sea-hydrothermal-vents/#:~:text=If%20one%20wants%20to%20collect,10%252C%20BBNJ%20Agreement]. Additional reports must be submitted via the CHM post-collection (w

reports must be submitted via the CHM post-collection (within 1 year) detailing where samples and data are held[3]

[https://blogs.ed.ac.uk/ecolaw/2023/06/01/how-does-the-new-bbnj-agreement-regulate-access-to-and-benefit-access-to-access-to-and-benefit-access-to

sharing-of-marine-genetic-resources-at-deep-sea-hydrothermal-

vents/#:~:text=5.Resources%253A%20Notification%20upon%20Utilization], and utilization notifications (e.g. if a product is developed) must also be lodged in the CHM[4] [https://blogs.ed.ac.uk/ecolaw/2023/06/01/how-does-the-new-bbnj-

agreement-regulate-access-to-and-benefit-sharing-of-marine-genetic-resources-at-deep-sea-hydrothermal-

vents/#:~:text=Well%252C%20aside%20from%20notification%20obligations,10(6)%252C%20BBNJ%20Agreement].

The piece highlights the comprehensive scope of the CHM's notification system and how it enables tracking MGR flows from collection to R&D, thereby operationalizing "benefit of all humanity" principles in practice. *Link*: ECO Law Blog

[https://blogs.ed.ac.uk/ecolaw/2023/06/01/how-does-the-new-bbnj-agreement-regulate-access-to-and-benefit-sharing-of-marine-genetic-resources-at-deep-sea-hydrothermal-vents/] **(Open access).**

3. "Historic Marine Biodiversity Treaty creates new ABS obligations for life sciences companies" – Covington & Burling LLP (Inside EU Life Sciences blog) – June 21, 2023. Summary: A practitioner-oriented analysis outlining the BBNJ Treaty's ABS requirements and their impact on industry. It emphasizes that

companies utilizing high-seas genetic resources will, for the first time, face **mandatory benefit-sharing** and compliance duties. In particular, any planned MGR collection or related activity must be **notified to the CHM at least 6 months in advance**[5] [https://www.insideeulifesciences.com/2023/06/21/historic-marine-biodiversity-treaty-creates-

new-access-and-benefit-sharing-obligations-for-life-sciences-

companies/#:~:text=2.%20Notification%20to%20the%20Clearing,Mechanism]. The blog details the extensive information to be provided (e.g. objectives, targeted species, collection sites, sponsoring entities) and the follow-up notifications after collection (e.g. where samples/DSI are stored, research results)[6]

[https://www.insideeulifesciences.com/2023/06/21/historic-marine-biodiversity-treaty-creates-new-access-and-benefit-marine-biodiversity-treaty-creates-new-acc

companies/#:~:text=Before%20carrying%20out%20%E2%80%9Cactivities%E2%80%9D%20(e,sharing%20obligations%20afterwards]

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benefit-sharing-obligations-for-life-sciences

companies/#:~:text=Within%20one%20year%20after%20the,findings%20from%20the%20activities%20undertaken]. It notes that the CHM will publicly house all these notifications[8]

[https://www.insideeulifesciences.com/2023/06/21/historic-marine-biodiversity-treaty-creates-new-access-and-benefit-sharing-obligations-for-life-sciences-

companies/#:~:text=and%20products%20developed%252C%20can%20be,products%20and%20any%20further%20development]

enabling transparency and monitoring. The article also summarizes the treaty's mechanism for monetary benefits (e.g. milestone payments, revenue shares) and various non-monetary benefits (data access, tech transfer, capacity-building) that will be coordinated through the CHM. *Link:* Inside EU Life Sciences [https://www.insideeulifesciences.com/2023/06/21/historic-marine-biodiversity-treaty-creates-new-access-and-benefit-sharing-obligations-for-life-sciences-companies/] (open access).

4. "Governance of MGRs in ABNJ and Interests of Developing States: A Move Away from Scientific Colonialism?" – Endalew L. Enyew (Opinio Juris Blog) – March 29, 2024. Summary: An expert blog post focusing on how the BBNJ Agreement's marine genetic resources framework addresses developing countries' concerns. It explains that rather than a permit system, the treaty adopts a "notification-based" multilateral approach: all MGR activities in ABNJ require transparency through the CHM[9] [http://opiniojuris.org/2024/03/29/governance-of-mgrs-in-abnj-and-interests-of-

developing-states-a-move-away-from-scientific-

 $colonialism/\#; \sim : text = treaty\%20 adopted\%20a\%20 notification, collection\%252C\%20 utilization\%252C\%20 and\%20 commercialization\%20 of]. \\$

The CHM is described as a central open-access platform for notifying and exchanging information on MGR collection, use, and commercialization[10] [http://opiniojuris.org/2024/03/29/governance-of-mgrs-in-abnj-and-

interests-of-developing-states-a-move-away-from-scientific-

colonialism/#:-:text=all%20Parties%252C%20irrespective%20of%20their,Art%2012]. Enyew highlights that this approach – combined with fair benefit-sharing – was a compromise between demands to treat MGRs as the "common heritage of mankind" and those favoring high-seas freedoms. The post concludes that the CHM and notification requirements help ensure that developing States can track and benefit from MGR utilization (countering "biopiracy"), but also observes that effectiveness will depend on robust

implementation and compliance by all parties. *Link*: Opinio Juris [https://opiniojuris.org/2024/03/29/governance-of-mgrs-in-abnj-and-interests-of-developing-states-a-move-away-from-scientific-colonialism/] (open access).

5. "The Likely Impact of the BBNJ Agreement on the Architecture of Ocean Governance" – Rakhyun E. Kim (Marine Policy, Vol. 165) – July 2024. Summary: A peer-reviewed article by Rakhyun Kim analyzing how the BBNJ Treaty will orchestrate existing institutions in ocean governance. It notes that the treaty is designed not to replace sectoral bodies but to harmonize and coordinate them. One key instrument of this orchestration is the Clearing–House Mechanism, described as an "essential orchestration tool" – a centralized open platform for information–sharing among existing frameworks[11]

[https://www.researchgate.net/publication/380493071_The_Likely_Impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=stakeholders%20(art.%2048).%20The%2

The CHM can facilitate cooperation by allowing relevant organizations (e.g. ISA, RFMOs, IMO) to access and contribute data, thereby improving coherence across regimes. The article suggests that, when implemented, the CHM will strengthen the treaty's normative influence by promoting its objectives within other bodies. However, it cautions that the CHM's success will depend on effective involvement of those bodies and technical design choices. Overall, Kim sees the CHM as a linchpin in creating a more polycentric and coordinated high-seas governance system[11]

[https://www.researchgate.net/publication/380493071_The_Likely_impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=stakeholders%20(art.%2048).%20The%2 Link: Marine Policy 165 (2024) 106190 (open access via journal/ResearchGate).

6. "The potential of the BBNJ clearing house mechanism to enhance knowledge pluralism in marine carbon dioxide removal assessment" – Miranda Boettcher & Kerryn Brent (Frontiers in Climate) – Dec 16, 2024. Summary: A scholarly Perspective examining how the BBNJ CHM could support environmental impact assessments (EIAs) for novel climate interventions (like marine carbon dioxide removal, mCDR). Boettcher and Brent map out the treaty's EIA process and argue that the CHM could inject greater knowledge pluralism by openly sharing baseline data, project details, and expert inputs. Their step-by-step analysis finds that the CHM can facilitate inclusion of diverse scientific and local knowledge at each EIA stage[12]

 $[https://www.frontiersin.org/journals/climate/articles/10.3389/fclim.2024.1497476/full\#:-:text=their%20assessment%20and%20governance, making%20on] \bullet the following the f$

The article acknowledges challenges (e.g. technical capacity, data quality) in operationalizing the CHM for this purpose, and offers recommendations – such as ensuring user-friendly design and clear guidelines – to strengthen the CHM's role in mCDR oversight[13]

[https://www.researchgate.net/publication/38049307]_The_Likely_Impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:text=the%20BBNJ%20environmental%20impact_of_the_BBNJ_Agreement_on_the_Architecture_of_Ocean_Governance#:~:tex

trusted EIA outcomes. *Link:* Frontiers in Climate **6**:1497476 (2024) (open access).

7. "BBNJ Agreement: A New Infrastructure to Foster Benefit Sharing of Marine Genetic Resources" – Hiroko Muraki Gottlieb, Jeff A. Ardron, & Abbe E.L. Brown (in Decoding MGR Governance under the BBNJ Agreement, Springer) – First online Feb 4, 2025. Summary: An open-access book chapter providing a comprehensive look at the BBNJ Agreement's institutional infrastructure for MGR governance, with particular focus on the Clearing-House Mechanism. The authors describe the CHM as primarily an "open-access platform" – a centralized hub to facilitate transparency, data-sharing, and international collaboration across all four substantive treaty pillars[14] [https://link.springer.com/chapter/10.1007/978-3-031-72100-

7_2#:~:text=The%20BBNJ%20Agreement%20established%20the,based%20management%20tools%252C%20including].

Crucially, the chapter emphasizes that the MGR benefitsharing framework is heavily dependent on the CHM's effective functioning: all notifications (pre- and postcollection, utilization), reports, and access to other repositories must occur via the CHM[15]

[https://link.springer.com/chapter/10.1007/978-3-031-72100-

 $7_2\#: \sim : \text{text=The} \% 20 \text{MGR} \% 20 \text{Framework} \% 20 \text{is} \% 20 \text{heavily, relevant} \% 20 \text{traditional} \% 20 \text{knowledge} \% 20 \text{of} \% 20 \text{Indigenous}] \bullet \text{text=The} \% 20 \text{MGR} \% 20 \text{Framework} \% 20 \text{Indigenous}] \bullet \text{text=The} \% 20 \text{MGR} \% 20 \text{Framework} \% 20 \text{Indigenous}] \bullet \text{text=The} \% 20 \text{MGR} \% 20 \text{Framework} \% 20 \text{Indigenous}] \bullet \text{text=The} \% 20 \text{MGR} \% 20 \text{Framework} \% 20 \text{Indigenous}] \bullet \text{text=The} \% 20 \text{MGR} \% 20 \text{MGR} \% 20 \text{Indigenous}] \bullet \text{text=The} \% 20 \text{MGR} \% 20 \text{MGR$

They note the treaty left many CHM details unspecified, raising concerns that without a timely and fully functional CHM, core obligations (like monitoring and ABS) "will be unmet" [16]

[https://link.springer.com/chapter/10.1007/978-3-031-72100-

 $7_2\#: \text{--text-monitoring} \% 20 \text{ and} \% 20 \text{ transparency} \% 20 \text{ with} \% 20 \text{ regard}, \text{MGR} \% 20 \text{ Framework} \% E2 \% 80 \% 99 \text{s} \% 20 \text{ requirements} \% 20 \text{ will} \% 20 \text{ be}] \bullet \text{--100} \text{ s} \% 20 \text{ requirements} \% 20 \text{ will} \% 20 \text{ requirements} \%$

The chapter discusses lessons from existing clearing-houses (CBD, etc.), the need for potential **pilot phases** or early development of the CHM prior to entry-into-force[17]

[https://link.springer.com/chapter/10.1007/978-3-031-72100-

7_2#:~:text=As%20discussed%20above%252C%20the%20BBNJ,pilot%20studies%20to%20determine%20the], and special provisions (e.g. ensuring SIDS' access and protecting confidential data). It concludes with the importance of designing a fit-for-purpose CHM before COP-1, as any substantial delay in operationalizing it could undermine the treaty's ambitious transparency and equity goals[18]

[https://link.springer.com/chapter/10.1007/978-3-031-72100-

 $7_2\#:\sim:\text{text=The}\%20\text{ architecture}\%20\text{ of}\%20\text{ the}\%20\text{ CIHM, inclusivity}\%20\text{ provisions}\%20\text{ in}\%20\text{ the}\%20\text{ Agreement}] \textbf{ [19]} \\ \text{[https://link.springer.com/chapter/10.1007/978-3-031-72100-100]} \\ \text{[https://link.springer.com/chapter/10.1007/978-3-031-700]} \\ \text{[https://link.springer.co$

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Link: Springer (2025), pp. 29-54 (open access chapter).

8. IDDRI Policy Brief – "The first substantive BBNJ Agreement Preparatory Committee: Preparing the ground for future implementation" – Klaudija Cremers, Julien Rochette, Elisa Coccorese, Daniel Kachelriess, & Cymie R. Payne (IDDRI, Paris) – April 2025. Summary: A policy brief analyzing outcomes of the PrepCom1 (April 2025) and offering recommendations for treaty implementation. It identifies the CHM as a pivotal component of the BBNJ institutional setup, noting that

PrepCom discussions focused heavily on how to operationalize the CHM's modalities [20] [https://www.iddri.org/en/publications-and-events/policy-brief/first-

substantive-bbnj-agreement-preparatory-

 ${\tt committee\#:} {\tt ::text=*\%20The\%20Clearing,} of {\tt \%20a\%20future\%20BBNJ\%20CHM].} \textbf{The brief}$

underscores that the BBNJ CHM's design can draw on diverse existing models – many multilateral environmental agreements have clearing-houses – and that these offer valuable lessons for the BBNJ context[21] [https://www.iddri.org/en/publications-and-events/policy-brief/first-

substantive-bbnj-agreement-preparatory-

recommendations, the authors stress ensuring the CHM is user-friendly, adequately funded, and integrated with other bodies' databases to avoid duplication. They also highlight the CHM's cross-cutting role in implementation: it will support not just MGR notifications, but also information-sharing for MPAs, EIAs, and capacity-building. By laying "solid foundations" for the CHM during the PrepCom phase, states can accelerate effective entry-into-force. Overall, the brief portrays the CHM as "the digital backbone" of the treaty, requiring early investment and expert input to get it right. Link: IDDRI Policy Brief, April 2025 [https://www.iddri.org/en/publications-and-events/policy-brief/first-substantive-bbnj-agreement-preparatory-committeel (open access PDF).

9. High Seas Alliance Briefing – "Operationalizing the Clearing-House Mechanism" – High Seas Alliance (PrepCom Deep Dive Series) – April 2025. Summary: A targeted policy brief by the High Seas Alliance (a coalition of NGOs) offering guidance on setting up the BBNJ Clearing-House Mechanism before the treaty's first COP. It examines the practical and technical steps needed to launch the CHM and ties them to the Preparatory Commission's work. Notably, the brief proposes initiating a "pilot phase" of the CHM prior to full entry into force, to test functionalities and gather feedback[22]

[https://highseasalliance.org/wp-content/uploads/2025/04/PrepCom-Deep-Dive-CIHM-April-2025-

Lpdf#:-:text=Alliance%20highseasalliance.intended%20to%20mean%20the]. It also discusses leveraging and linking existing clearing—houses (e.g. those of CBD, ISA) to avoid reinventing the wheel. Key issues addressed include: defining the CHM's governance (who will design/build it), ensuring user accessibility (especially for developing states), and securing funding for its development and maintenance. The briefing highlights that a phased approach — starting small (with core features like the batch ID generator and basic databases) and scaling up — may be realistic given time and resource constraints. This HSA analysis was influential at PrepCom1, where delegations (e.g. CARICOM, AOSIS) echoed its call for a technical expert group and a clear roadmap for the CHM's rollout[23] [https://enb.iisd.org/marine-

biodiversity-beyond-national-jurisdiction-bbnj-cop-prepcom1-

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 $\hbox{[24]} \hbox{[https://enb.iisd.org/marine-biodiversity-beyond-national-jurisdiction-bbnj-cop-prepcoml-nation-bbnj-cop-prepcoml-nation-bbnj-cop$

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Link: High Seas Alliance Deep Dive Brief (April 2025) – available via HSA.

10. "Compliance and Accountability Mechanisms in the BBNJ Agreement" – Caroline E. Foster (New Zealand Journal of Environmental Law, forthcoming 2024; SSRN pre-print May 2025). Summary: A legal analysis focusing on the treaty's provisions for compliance and transparency, and how procedural obligations are enforced. Foster observes that the BBNJ Agreement imposes relatively light substantive duties but very heavy procedural obligations (e.g. reporting, notifications) to ensure parties' actions are transparent [25]

[https://papers.ssrn.com/sol3/papers.cfm?

 $abstract_id = 5268824\#: \sim : text=relatively \%20 light \%20 substantive \%20 obligations \%20 complemented, the \%20 operating \%20 procedures \%20 for \%20 the] \blacksquare 0.0000 to 0.0000 t$

The paper discusses the roles of the future Implementation and Compliance Committee (ICC) and the Clearing-House Mechanism in this context. It argues that robust compliance will hinge on effective operation of the CHM as a reporting and information-sharing hub[26] [https://papers.stm.com/sol3/papers.cfm?

abstract_id=5268824#:~text=information.the%20BBNJ%20Clearing%20House%20Mechanism]. For example, parties must use the CHM to file notifications (on MGR use, EIA reports, etc.), and the ICC can then review these inputs to assess implementation. Foster recommends that, as states elaborate the ICC's mandate and the CHM's operating procedures, they prioritize user-friendly transparency tools and clear timelines for submissions. In essence, the CHM is portrayed as an integral part of the agreement's accountability architecture, enabling peer scrutiny and public oversight. This piece provides a forward-looking view on how to design CHM procedures that complement the treaty's compliance committee and foster a culture of compliance among states. Link: SSRN pre-print (May 2025)[26]

[https://papers.ssrn.com/sol3/papers.cfm?

abstract_id=5268824#:~:text=information,the%20BBNJ%20Clearing%20House%20Mechanism]

11. "The BBNJ clearing-house mechanism: considerations for its diverse functions, users, and sources" – Christine Gaebel, Harriet Harden-Davies, Marjo Vierros, et al. (Frontiers in Ocean Sustainability) – July 18, 2025. Summary: A comprehensive academic review devoted entirely to the BBNJ Clearing-House Mechanism, examining what an effective CHM will require. The authors outline the CHM's envisioned multifaceted role: it will serve as the central repository for data and documents related to all four treaty elements (MGRs, ABMT/MPAs, EIAs, and CB&TMT)[27] [https://www.frontiersin.org/journals/ocean-

and additionally act as a collaborative platform to match capacity-building needs with available resources [28]

[https://www.frontiersin.org/journals/ocean-

 $sustainability/articles/10.3389/focsu.2025.1584927/full \#: \sim text=knowledge \%252C\%20 and \%20 information \%20 repository \%20 hosting, for \%20 biodiversity \%20 of \%20 areas \%20 beyond] \blacksquare 10.0000 areas \%20 beyond \%20 \%20 be$

The review analyzes lessons from existing mechanisms (e.g. CBD's clearing-houses) to identify best practices in design,

technology, and governance. Key considerations discussed include: accommodating diverse end-users (scientists, policymakers, Indigenous knowledge holders), ensuring open access while protecting sensitive information, interoperability with external databases, and long-term financing and staffing for the CHM. The paper emphasizes that building a "fit-for-purpose" CHM is an intricate but critical task[29]

[https://www.frontiersin.org/journals/ocean-

sustainability/articles/10.3389/focsu.2025.1584927/full#:-:text=facilitate%20 and %20 advance%20 data%20 sharing, which%20 are%20 critical%20 for %20 implementing properties of the following prope

- without it, the treaty's implementation will lack crucial support. It concludes with recommendations such as starting with a needs assessment of user requirements, adopting a modular development approach, and possibly launching a prototype CHM during the interim period. This article is one of the most detailed scholarly treatments of the CHM to date, underscoring its centrality to BBNJ's success. *Link:* Frontiers in Ocean Sustainability 3:1584927 (2025) (open access)[30]

[https://www.frontiersin.org/journals/ocean-

sustainability/articles/10.3389/focsu.2025.1584927/full#:::text=realising%20 these%20 ambitions%252C%20 however%252C%20 is, Moreover%252C%20 it %20 it %20

[29] [https://www.frontiersin.org/journals/ocean-

 $sustainability/articles/10.3389/focsu.2025.1584927/full \#: \\ \text{\sim text=facilitate} \& 20 \\ \text{and} \& 20 \\ \text{advance} \& 20 \\ \text{data} \& 20 \\ \text{sharing}, \\ \text{which} \& 20 \\ \text{are} \& 20 \\ \text{critical} \& 20 \\ \text{for} \& 20 \\ \text{implementing}] \\ \text{\sim text=facilitate} \& 20 \\ \text{and} \& 20 \\ \text{advance} \& 20 \\ \text{data} \& 20 \\ \text{sharing}, \\ \text{which} \& 20 \\ \text{are} \& 20 \\ \text{critical} \& 20 \\ \text{for} \& 20 \\ \text{implementing}] \\ \text{\sim text=facilitate} & 20 \\ \text{and} \& 20 \\ \text{for} \& 20$

12. "The Law of the Sea Goes Digital—Indigenous Peoples" 'Right to Exclude' Their Traditional Knowledge from the Digital Sphere" - Shani Friedman (Ocean Development & International Law, Vol. 56(1)) - 2025. Summary: A specialized legal article examining the BBNJ Agreement's treatment of traditional **knowledge (TK)** of Indigenous Peoples and local communities, especially as it will be handled via the CHM. Friedman points out that while environmental treaties commonly encourage sharing of knowledge, the BBNJ CHM is unique in explicitly addressing traditional knowledge associated with marine genetic resources. The treaty calls for TK to be included in the CHM (with free, prior, informed consent and respecting confidentiality), raising the question of whether communities have a "right to exclude" their knowledge from this digital platform. The analysis notes that **Indigenous communities may** be wary of uploading sensitive biocultural information to a global clearing-house, fearing misappropriation. It argues that the CHM's design must incorporate safeguards (e.g. controlled access, community protocols) to protect Indigenous rights and honor the treaty's provision that TK sharing is voluntary and on mutually agreed terms. The author situates this discussion in broader developments (e.g. the Nagoya Protocol's approach to TK) and concludes that the CHM will need governance innovations to reconcile open-access principles with the protection of Indigenous intellectual heritage. Link: Ocean Dev. & Int'l Law **56**(1) (2025), pp. 33-51 (paywalled; summary based on abstract and author's analysis).

13. "Data Management and the 'BBNJ Standardized Batch Identifier' under the BBNJ Agreement" – Charles Lawson,

Frances Humphries, Marcel Jaspars, & Muriel Rabone (in Decoding MGR Governance, Springer) – August 2024.

Summary: This open-access chapter delves into two innovations for traceability in the BBNJ Agreement – the Clearing-House's "BBNJ standardized batch identifier" system and the treaty's requirements for data management plans (DMPs). It explains that when a State or researcher notifies a planned collection of MGRs, the CHM will automatically issue a unique "BBNJ identifier" for that batch of samples[31]

[https://papers.ssrn.com/sol3/papers.cfm?

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That identifier is then used in all subsequent notifications and reports to link information about the samples (from collection through utilization) across the CHM, making it possible to track the chain of custody and uses of each genetic resource[31]

[https://papers.ssrn.com/sol3/papers.cfm?

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The authors discuss how this system, together with DMPs (which outline standards for data generation, storage, and sharing), can help ensure MGR data are FAIR (Findable, Accessible, Interoperable, Reusable). The chapter reviews similar identifiers in other regimes (like the Nagoya Protocol's checkpoint system) and addresses challenges like harmonizing with existing databases and encouraging compliance by researchers. It ultimately finds that the batch ID and DMP requirements, if properly implemented via the CHM, will greatly enhance transparency and benefit-sharing by allowing all stakeholders to follow where MGRs from ABNJ end up and how benefits are being shared[32]

[https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4897429#:~:text=

(DMP), obligations%20and%20the%20areas%20that]. Link: Springer (2025), Chapter 12 (open access)[31] [https://papers.ssrn.com/sol3/papers.cfm?

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14. "The Novel Notification Information System for Marine Genetic Resources under the BBNJ Agreement" – Frances Humphries, Marcel Jaspars, Jessica Lavelle, & Daniel Kachelriess (Springer, 2024). Summary: Another chapter from the "Decoding BBNJ" series, focusing on the treaty's notification-based ABS system and fleshing out Articles 11–12. The authors characterize the BBNJ's approach as a "light-touch" notification system – unlike a permitting regime, it requires users to self-report activities to the CHM, leaving many procedural specifics to be determined [33]

[https://papers.ssrn.com/sol3/papers.cfm?

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Through a textual and negotiating-history analysis, the chapter interprets key features: the **two-step notification process** (pre-collection and post-collection), **utilization notifications** for R&D and commercialization, and special cases like notifying access to ex situ samples or DSI in repositories[34]

[https://papers.ssrn.com/sol3/papers.cfm?

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It provides practical considerations on how these innovative features might work (e.g. how the CHM could interface with existing gene bank databases, or alert parties of new activities). The authors highlight several priority issues for clarification by the COP: for instance, what exactly should be included in notifications, how the CHM will verify or flag entries, and how to ensure compliance without a licensing system. By offering these insights, the chapter aims to guide policymakers in building a notification mechanism that is effective but not overly burdensome. It concludes that if implemented well, the CHM-centered system can achieve the treaty's goals of transparency and equity without stifling scientific research[34] [https://papers.stm.com/sol3/papers.cfm?

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Link: Springer (2024), Chapter 5 (open access)[34]

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15. "Monitoring and Transparency Aspects of MGR Utilization under the BBNJ Agreement" – Arne Langlet, Paul Dunshirn, Marcel Jaspars, et al. (Springer, 2024). Summary: This chapter examines how the BBNJ treaty will monitor the use of marine genetic resources over time, focusing on Article 16's monitoring and transparency system. It describes the envisioned system as a combination of notification obligations, ongoing reporting, and digital tracking via the CHM's identifiers[35] [https://papers.ssm.com/sol3/papers.cfm?

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In essence, the CHM will record not only one-off notices of collection, but also subsequent updates - such as reports on how samples have been used, results of research, and benefitsharing outcomes. The authors compare this to monitoring mechanisms in other regimes (e.g. the Nagoya Protocol's checkpoints, or compliance systems in fisheries). They identify potential gaps (for instance, how to handle non-state actors or ensure data quality in CHM submissions) and suggest future policy developments to address them. One key point is the need for the CHM to interface with external patent databases and scientific publication indexes to catch any utilization of MGRs that might not have been voluntarily reported. The chapter ultimately argues that, if properly empowered, the CHM can greatly enhance accountability: it creates a publicly accessible log of who is doing what with MGRs, which in turn enables the COP and ABS Committee to evaluate whether benefits are being shared fairly. Strengthening the CHM's monitoring function - possibly with compliance triggers for missed reports - is deemed essential for the treaty's longterm credibility[35] [https://papers.ssrn.com/sol3/papers.cfm?

 $abstract_id = 4897394\#: \sim :text = This\%20 chapter\%20 examines\%20 monitoring\%20 and, effectiveness\%20 of\%20 the\%20 monitoring\%20 and] .$

Link: Springer (2024), Chapter 8 (open access)[35]

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