



Alliance of Small Island States (AOSIS)

Submission on the technical aspects of the operationalization of the Clearing-House Mechanism under the BBNJ Agreement

28 November 2025

Background

This submission was prepared on behalf of the 39 small island developing states (SIDS) that comprise the Alliance of Small Island States (AOSIS), based on a series of virtual consultations with, and inputs received from, SIDS experts, particularly:

- a. **National users:** Relevant national experts or national focal points involved in the use of existing clearing house mechanisms, or other similar platforms, sharing lessons learnt, areas of improvement, and inputs on features and functions, including on confidentiality and intellectual property;
- b. **Technical experts and designers:** Information technology experts, including on data management, user interfaces and software, Artificial Intelligence (AI) capabilities¹, confidentiality and intellectual property;
- c. **Social and cultural interests:** Experts with inputs on safeguards and means of protecting the interests and rights of Indigenous Peoples and of local communities.
- d. **Scientific experts:** Particularly those working in the area of genetic resources.

Further consultations with such experts from SIDS are highly encouraged as the Consultant proceeds with advancing work on the remainder of Phase 1 in the Terms of Reference.

Taking into account key AOSIS positions throughout the sessions of the Preparatory Commission, this submission aims to elaborate on the special circumstances of SIDS, our unique contexts, interests and priorities in the operationalisation of the Clearing House Mechanism, based on the feedback received from SIDS experts.

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¹ AOSIS consultations with SIDS experts on AI capabilities should not be taken to imply that AOSIS necessarily supports the use of AI for the Mechanism

Section 1: Preparation of the stocktake study

In the preparation of the stocktake study on existing clearing house mechanisms and information sharing platforms, the following are key priorities for SIDS:

1. The study must include a dedicated section on SIDS, including lessons learned, challenges, resource constraints, opportunities and inputs received via consultations, based on our experience using the clearing house mechanisms and information sharing systems being considered. SIDS face unique challenges, especially in relation to limited human resources and connectivity challenges, including issues around access, that hinder our ability to effectively access and use such systems. It is therefore critical that we develop a deeper understanding of these issues and how best to appropriately address them so as not to perpetuate them in the design of the BBNJ Clearing House Mechanism.
2. Of importance, the study must also evaluate the ways and means in which such mechanisms and systems have effectively maintained safeguards for the Traditional Knowledge of Indigenous Peoples and of local communities, and ensured that such knowledge was acquired and distributed with the free, prior and informed consent of the Indigenous Peoples and/or of the local communities who are holders (collectively or individually) of such knowledge. (See section 4 on page 4)
3. The study must also identify and assess the various models used by these mechanisms and systems, particularly in relation to: user access and upload functionalities; protocols for managing public versus confidential information; and approaches for assigning national focal points versus multi-user **or** tiered access structure and capabilities.
4. There must also be an analysis of effectiveness in meeting the goals and objectives of the mechanisms and systems being considered, while recognising the distinct nature of the BBNJ Agreement and that simply duplicating a particular existing model may not be fully fit-for-purpose to achieve the functions of the clearing house mechanism as articulated by the Agreement. However, there is utility in striving to build off of existing mechanisms and systems where applicable.
5. Finally, a non-exhaustive list of clearing house mechanisms and information systems to consider as part of the stocktake study includes:
 - a. Convention on Biological Diversity: [Clearing House Mechanism](#)
 - b. Nagoya Protocol [ABS Clearing House Mechanism](#)
 - c. International Treaty on Plant Genetic Resources for Food and Agriculture: [Global Information System](#)
 - d. Basel, Rotterdam and Stockholm conventions: [Joint Clearing House Mechanism](#)
 - e. The Intergovernmental Oceanographic Commission of UNESCO ([UNESCO-IOC](#))
 - f. Cartagena Protocol on Biosafety: [Biosafety Clearing House](#)
 - g. [The Santiago Network](#)
 - h. [The ASEAN Clearing House Mechanism](#)

- i. [The Nairobi Convention Clearing House Mechanism](#)
- j. [Biodiversity and Ecosystem Services Network - BesNet](#)
- k. [The Observatory - Escazu Agreement](#)
- l. [Pacific Islands Protected Areas Portal \(PIPAP\)](#)
- m. [Pacific Climate Change Portal](#)
- n. [SPC Pacific Data Hub](#)
- o. [InforMEA - UN Information Sharing Portal](#)
- p. [Pacific Ocean Portal](#)

Section 2: Preparation of the draft work-plan for the initial phase of the mechanism and the draft road-map for phased operationalisation

In the preparation of the draft work-plan for the initial phase of the mechanism, emphasis should be placed on urgency and efficiency, while prioritising:

1. functions of the Mechanism relating to marine genetic resources of areas beyond national jurisdiction, including the process for generating the 'BBNJ' standardised batch identifiers;
2. modalities for matching capacity-building needs with the support available and with providers for the transfer of marine technology;
3. considerations relating to the Traditional Knowledge of Indigenous Peoples and of local communities, including free, prior, and informed consent and other rights-based safeguards, as well as their engagement with the Mechanism;
4. the terms of cooperation with relevant instruments, frameworks and bodies; and
5. resource requirements for the operationalisation of the Mechanism.

Moreover, the preparation of the draft road-map for the phased operationalisation should also include opportunities for assessing and evaluating the Clearing House Mechanism and its operationalised phases and identifying areas for improvement for subsequent action.

Section 3: Technical requirements for the operationalisation of the BBNJ Clearing House Mechanism

The clearing house mechanism under the BBNJ agreement needs to be tailored to address the technical challenges SIDS face historically in using such systems. These challenges include remoteness, limited markets, narrow economic bases, small administrations, limited human capacity and high costs for energy and technical infrastructure.

For instance, the United Nations International Telecommunications Union (ITU) reported that only 85 per cent of the population in SIDS was within reach of a mobile broadband network (3G

or above) – well below the global average of 95 per cent, while the median price of mobile Internet was 94 per cent higher in SIDS than the world's median. Moreover, technical infrastructure for both mobile and computer internet connectivity is limited. (See full report [here](#))

To this end, the clearing house mechanism under the BBNJ agreement needs to consider the following priorities for SIDS:

1. The system must be equipped with offline capabilities so that even in remote areas, SIDS may access the platform to input information until such time that a connection is restored and data can sync. The clearing house mechanism should also include a cloud-like feature that allows for information and data to be accessed remotely.
2. Reporting templates for the Mechanism should be streamlined to avoid excessive burden for users of the Mechanism. One possibility is to draw from existing templates that are used in current international scientific practice for the submission of pre-cruise and post-cruise reports. Parties will need to agree on the minimum data required for reporting to ensure clear standards for compliance. It would also be useful for the CHM to allow entries to be updated over time.
3. While it is understood that the clearing house mechanism would likely have to store a high volume of information and data, it must be designed and organised in an efficient manner to allow for easier and faster memory processing and online connectivity. The platform should be easy to navigate with clear categories and minimal clicks required to access relevant information.
4. The mechanism also needs to include a targeted notification and alert system that would trigger alerts specifically to SIDS that need to be aware of, for example, activities happening adjacent to or otherwise close to their respective Exclusive Economic Zones and/or Extended Continental Shelves. This could be done through designing a subscription-type profile system where users can select the key activities, themes and issues they would like to be notified of based on their geographical location or proximity to activities. Keyword tags could also be used to help filter and identify activities, issues and themes users can create/need to be alerted on.
5. Moreover, to address issues of limited human resources and managing high volumes of information, weekly summary reports generated based on information uploaded could be useful.
6. To enable interoperability between the clearing house mechanism and existing systems, the platform must allow for the seamless translation of data and information from other systems to be incorporated into the clearing house mechanism. As one example, data collected by regional fishery bodies and regional fishery management organizations/arrangements can be pertinent for BBNJ activities. There would therefore need to be standardised methodologies and formats for information and data to be

transferred; however, this should not be done in such a way as to disrupt protocols in place for existing mechanisms and systems.

7. The clearing house mechanism should also build in functionalities for the dissemination of information across all package elements and potentially managing information exchange and input related to cooperation and collaboration with other instruments, frameworks and bodies.
8. The mechanism could also employ satellite servers to ensure access is not centralised to one location where it could affect processing time and connectivity for SIDS. The mechanism should also include a dedicated SIDS page.
9. The system must also be multilingual and employ librarian features with access to a human resource and real-time access to help and assistance.
10. The mechanism could also allow for different user access types, e.g. Administrators who can organise data and information for their respective country profile, and general users who can upload and access data and information. Administrators should have sufficient visibility, e.g., over ongoing expeditions, available capacity-building opportunities, etc. to monitor the states' compliance with the Agreement's obligations. Parties will need to agree on the role of national focal points (e.g., validating/authorizing other users) in the implementation of the CHM.
11. Consideration must be given to various implications of emerging technologies, including artificial intelligence (AI), to manage marine biodiversity data more effectively, before deciding whether to use AI for the Mechanism, including:
 - a. Whether AI can enhance system design, monitoring, and maintenance, including compliance and traceability; what AI-related risks there might be in this effort, including bias, errors, or hallucinations; and how to address these risks by promoting transparency, ethical use, and culturally respectful practices if AI is used.
 - b. How to safeguard intellectual property rights and data sovereignty, especially the TK of IPLC, if AI is used, given the danger of AI to misrepresent such TK as well as aggregate such TK for its own learning without the free, prior, and informed consent of the holders of that TK;
 - c. How to ensure equitable participation in the use of AI tools, particularly for SIDS, if AI is used.
 - d. Whether AI tools can support decision-making, knowledge integration, multilingual accessibility, and capacity-building.

Section 4: Safeguarding the Traditional Knowledge of Indigenous People and of local communities

From the outset, the clearing house mechanism must be designed to allow for the full participation of Indigenous Peoples and of local communities, including through:

1. Fully recognising Indigenous Peoples as well as local communities as categories of users able to upload their own relevant data, information and knowledge, as appropriate, including through facilitating access to create user profiles.
2. The clearing house mechanism must include clear and express indicators that free, prior and informed consent was properly obtained in the sharing of any knowledge from holders, including, whenever possible, verifiable testimonials from those knowledge holders that they gave such consent.
3. To this end, the mechanism must be designed with full consideration for lessons learned on how other databases, repositories, and information sharing systems have addressed the protection and sharing of traditional knowledge, knowledge of Indigenous Peoples, and local knowledge systems.
4. There must be strong emphasis on promoting robust consultations, engagements and outreach with Indigenous Peoples as well as local communities to increase awareness of the use, role and function of the BBNJ Clearing House Mechanism, and their participation in the mechanism.

Section 5: The generation and use of the “BBNJ” standardized batch identifier to operationalise the relevant provisions of Part II of the Agreement

The design and use of the clearing house mechanism under the BBNJ Agreement needs to consider how interoperability will function in the management of data and information on genetic resources. More specifically, the mechanism should be designed in such a way as to allow for existing data repositories and systems to feed into it seamlessly via standardised protocols, including more informal databases. However, there needs to be adequate consultations, including with scientists and experts from SIDS, to understand the different data repositories and systems in place. It will also be important to account for different benefit sharing modalities that Parties would agree on and recommend necessary options for both direct and indirect benefits, inclusive of ABMT, CBTMT, reporting, publication, patents working with the ABS committee

In making recommendations or identifying options for the BBNJ standardised batch identifier, it is critical to take into account that scientific capacity and infrastructure differ across SIDS and other countries.

Parties will need to agree on the stage(s) at which the BBNJ standardized batch identifier can be tagged onto relevant data and information on genetic resources. One possibility for the

generation and use of the BBNJ standardized batch identifier could be to tag a batch identifier to a deep-sea expedition/cruise conducted in the high seas rather than individual specimens or samples collected. While more clarity would be needed on the feasibility of such an approach, the batch identifier could include basic metadata such as (a) expedition name, (b) general location, (c) date range, and (d) storage location, which would allow for traceability of specimens and samples collected from areas beyond national jurisdiction.

Finally, the consultant should conduct research to identify options from other regimes or systems that generate and use unique batch identifiers, and the various functionality features that allow for their generation and use in practice.

END
