



Convention on Biological Diversity

Distr.: General
4 October 2023

Original: English

**Ad Hoc Open-ended Working Group on
Benefit-sharing from the Use of Digital
Sequence Information on Genetic Resources
First meeting
Geneva, 14–18 November 2023
Item 3 of the provisional agenda*
Issues for further consideration set out in
the annex to decision 15/9**

Synthesis of views pursuant to decision 15/9

Note by the Secretariat

I. Introduction

1. At its fifteenth meeting, the Conference of the Parties to the Convention on Biological Diversity adopted decision [15/9](#) on digital sequence information on genetic resources. In the decision, the Conference of the Parties decided to establish, as part of the Kunming-Montreal Global Biodiversity Framework, a multilateral mechanism for benefit-sharing from the use of digital sequence information on genetic resources, including a global fund (para. 16).
2. It also established a fair, transparent, inclusive, participatory, and time-bound process to further develop and operationalize the mechanism. The process includes work by the Ad Hoc Open-ended Working Group on Benefit-sharing from the Use of Digital Sequence Information on Genetic Resources to undertake further development of the multilateral mechanism, including the elements identified in the annex to the decision (para. 18).
3. In paragraph 20 of the decision, Parties, other Governments, indigenous people and local communities and relevant organizations were invited to submit to the Executive Secretary views on the issues set out in the annex to the decision, namely:
 - (a) Governance of the fund;
 - (b) Triggering points for benefit-sharing;
 - (c) Contributions to the fund;
 - (d) Potential to voluntarily extend the multilateral mechanism to genetic resources or biological diversity;
 - (e) Disbursement of monetary benefits, including information on geographical origin as one of the criteria;

* CBD/WGDSI/1/1.

- (f) Non-monetary benefit-sharing, including information on geographical origin as one of the criteria;
- (g) Other policy options for the sharing of benefits from the use of digital sequence information on genetic resources, including as identified through further analysis, as referred to in paragraphs 6 and 7 of the present decision;
- (h) Capacity development and technology transfer;
- (i) Monitoring and evaluation and review of effectiveness;
- (j) Adaptability of the mechanism to other resource mobilization instruments or funds;
- (k) Interface between national systems and the multilateral mechanism on benefit-sharing;
- (l) Relationship with the Nagoya Protocol;
- (m) Role, rights and interests of indigenous peoples and local communities, including associated traditional knowledge;
- (n) Role and interests of industry and academia;
- (o) Linkages between research and technology and the multilateral mechanism on benefit-sharing;
- (p) Principles of data governance.

4. In paragraph 21 of the decision, the Executive Secretary was requested to compile and synthesize the views submitted and to make them available to the Ad Hoc Open-ended Working Group on Benefit-sharing from the Use of Digital Sequence Information on Genetic Resources.

5. Accordingly, by notification No. [2023-003](#) of 31 January 2023, the Executive Secretary invited the submission of views on the list of issues for further consideration set out in the annex to decision 15/9. Views were received from 20 Parties to the Convention, one non-Party and 38 organizations and other observers. Annex II contains the detailed list of submitters. The full text of the submissions has been made available online.

6. Section II of the present document contains a synthesis of the views submitted on the 16 issues identified in the annex to decision 15/9. A number of the issues are interrelated with some elements that cut across multiple issues. The issues have been grouped in the present synthesis to facilitate consideration by the Working Group.

7. The grouping are as follows:

- Section II.A, on contributions to the fund, addresses triggering points for benefit-sharing, contributions to the fund and some aspects of the role and interests of industry.
- Section II.B, on disbursement of the funds, addresses disbursement of monetary benefits, including information on geographical origin as one of the criteria, as well as some aspects of the role, rights and interests of indigenous peoples and local communities, including associated traditional knowledge.
- Section II.C, on non-monetary benefit-sharing, addresses non-monetary benefit-sharing, including information on geographical origin as one of the criteria, capacity development and technology transfer, and linkages between research and technology and the multilateral mechanism on benefit-sharing.
- Section II.D, on governance, addresses governance of the fund, monitoring and evaluation and review of effectiveness and some aspects of the role, rights and interests of indigenous peoples and local communities, including associated traditional knowledge, as well as role and interests of industry and academia and data governance.

- Section II.E, on relation to other approaches and systems, addresses the potential to voluntarily extend the multilateral mechanism to genetic resources or biological diversity, other policy options, the interface between national systems and the multilateral mechanism on benefit-sharing, relationship with the Nagoya Protocol, and adaptability of the mechanism to other resource mobilization instruments or funds.

8. A list of the acronyms used in the synthesis is provided in annex I.

II. Synthesis of views on issues for further consideration on benefit-sharing from the use of digital sequence information on genetic resources

A. Contributions to the fund

9. This first group addresses the monetary allocation and replenishment mechanisms for this fund from potential sources, and the role of industry in these contributions. Issue (n), role and interests of industry and academia, is included in the present section only in terms of the aspects of monetary contributions from industry, while the rest of issue (n) is addressed in section D.3.

1. Triggering points for benefit-sharing (issue (b) in the annex to decision 15/9)

10. The submissions included numerous suggestions for potential triggering points for benefit-sharing, as follows:

- (a) Production;¹
- (b) Use;²
- (c) Commercialization:³
 - (i) A Party⁴ specified that the product at commercialization should be derived from digital sequence information (DSI) from a genetic resource in a country Party to the Convention;
 - (ii) Others suggested that benefit-sharing from commercialization should take the form of a percentage of the retail price only once income is generated;⁵
 - (iii) An organization⁶ proposed a decoupled access and benefit-sharing (ABS) model, where at access, the users of DSI register in a single global platform, granting them legal certainty for all DSI- (and genetic resource-) related activities, and a “presumption of prior informed consent” for all Convention on Biological Diversity provider countries participating in the mechanism. The benefit-sharing then comes at the product registration requirements for commercial activities;
- (d) Intellectual property rights.⁷ One suggestion⁸ was that the addition of a “yes” or “no” question about the use of natural information in intellectual property rights registration, associated with reports of quarterly/annual sales from related products, should help the implementation of benefit-sharing linked to intellectual property rights;
- (e) Collection and biosurvey;⁹

¹ African Group.

² African Group.

³ African Group, Brazil, European Union and its member States, Türkiye, Uganda.

⁴ Colombia.

⁵ Brazil, WSI.

⁶ Endevo Biosciences.

⁷ Brazil, Türkiye, Uganda.

⁸ Ruiz.

⁹ Uganda.

- (f) Export;¹⁰
- (g) Third party transfer of already accessed biological resources;¹¹
- (h) Transfer of the results of research;¹²
- (i) Use of analysis tools of databases, specifically bulk download by commercial entities, access to more processed data and data storage;¹³
- (j) Voluntary contributions;¹⁴
- (k) Fees for accessing databases:
 - (i) It was suggested that fees for accessing a database presented the potential to generate revenue and minimize bureaucracy, legal hurdles, and operating costs, and would encourage providers to feed the database to make it more valuable;¹⁵
 - (ii) An organization described how click-wrap agreements for access to databases could be used to define benefit-sharing requirements;¹⁶
 - (iii) Suggestions were made for different approaches for different types of databases, such as public versus private databases;¹⁷
 - (iv) A share of the access fee should go to maintain the database.¹⁸

11. However, a number of submissions identified challenges with some of the potential triggering points:

(a) A Party¹⁹ pointed out that countries do not have a “product registry” for goods based on DSI research, and so the proposal for a system that relies on such registration is unlikely to succeed;

(b) An organization²⁰ pointed out that a trigger related to commercialization of final products assumes that sequences directly incorporated in the commercial product were derived from a genetic resource that is present only in one country, which is unlikely and impractical for implementation, and expressed the view that a system compensating countries when sequences from their genetic resources are used into a successful commercial product will not generate meaningful funds;

(c) On intellectual property rights, a Party expressed the view that application for or granting of intellectual property rights should not be a trigger for benefit-sharing as it is not a proven correlation to successful commercialization;²¹

(d) Several submissions²² expressed the view that access to DSI in public databases should not be a triggering point for benefit-sharing as it could compromise the principles of open data (see further discussion of open data in sections C. 2 and D.5);

¹⁰ Uganda.

¹¹ Uganda.

¹² Uganda.

¹³ Canada.

¹⁴ African Group, Australia, Canada, Türkiye, United States of America, IIFB, JPMA, SPNCH, WSI.

¹⁵ Ginko Bioworks.

¹⁶ TWN.

¹⁷ Japan, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States, JPMA.

¹⁸ TWN.

¹⁹ Canada.

²⁰ Ginko Bioworks.

²¹ Canada.

²² African Group, Canada, JPMA, SPNCH.

(e) One Party,²³ while suggesting a potential trigger at the access of database services, stated that the full impact on interoperability and open science should be weighed first.

12. Other issues raised in connection to the issue of triggering points for benefit-sharing included:

(a) The need to avoid hindering science, research and innovation with whatever trigger point is identified;²⁴

(b) The need for trigger points to be operationally simple, enforceable, and provide certainty and predictability to users and countries;²⁵

(c) That triggering points should not excessively burden a particular industry compared to others;²⁶

(d) That triggering points should not be applied retroactively;²⁷

(e) That there is no need for a direct correlation between use of a profit-generating DSI and benefit-sharing;²⁸

(f) That triggering points might not take place at the same point along the value chain, depending on the industry or the regional context for the value chain, and that trigger points could be either activities, or points in the process, all of which would have to be considered in choosing trigger points for benefit-sharing;²⁹

(g) That monetary and non-monetary benefit-sharing obligations might require different trigger points;³⁰

(h) The role of tracking and tracing,³¹ including views that benefit-sharing should not rely on a track and trace regime;³² and that the lack of tracking and tracing was the reason why it had not been possible to pin down triggering points for benefit-sharing;³³

(i) That a trigger point would not last forever for a particular DSI, citing the patent system as an example of this modality;³⁴

(j) The challenge of discussing triggering points without clarity on the scope of DSI.³⁵

13. It was noted that the studies requested in paragraph 22(b) and (c) of decision 15/9 and being commissioned by the Executive Secretary would also help inform the discussions on triggering points.³⁶

14. Some remarks on “specific points of alignment” (with other resource mobilization instruments) under E.5 are also relevant to the discussion on trigger points.

2. Contributions to the fund (issue (c))

15. This issue saw comments and reflections around three main aspects in the submissions: where contributions to the fund should come from; how much should be paid into the fund and how often;

²³ Canada.

²⁴ African Group, Australia, Canada, Türkiye, United States, IIFB, JPMA, SPNCH, WSI.

²⁵ ICC.

²⁶ JPMA.

²⁷ Japan, BIA, ICC.

²⁸ United Kingdom.

²⁹ ICC.

³⁰ DFG.

³¹ IIFB.

³² Canada.

³³ Japan.

³⁴ JBA.

³⁵ LERU, JBA, JPMA.

³⁶ European Union and its member States.

and what the process to decide on those two points should be. Some points here are also related to points raised in section A.1 (triggering points for benefit-sharing) and section B.1 (disbursement of monetary benefits, including information on geographical origin as one of the criteria).

16. Various suggestions were made on where contributions to the fund should come from:

(a) Primarily from users of DSI,³⁷ with mandatory contributions from developed countries' industry;³⁸

(b) Other sources of funding, such as private contributions,³⁹ public institutions and governments,⁴⁰ a levy on non-consumptive uses of DSI⁴¹ such as laboratory equipment, or profit from trophy hunting and other games;⁴²

(c) Solely voluntary funds,⁴³ which would be simple, quickly implemented and avoid the need for trigger points;

(d) Voluntary funds as an offset for the global fund on DSI.⁴⁴

17. Most submissions suggested a mix of the above contributions. The provenance of the payments themselves to the global fund were suggested going through intellectual property rights holders/manufacturers themselves,⁴⁵ or through national governments.⁴⁶ One Party⁴⁷ reflected that institutions could contribute on behalf of their researchers, and another⁴⁸ suggested that databases might have to accept payments.

18. Different proposals were made on how to calculate the contributions to the fund:

(a) A proportion of the global commercial value realized through the use of DSI,⁴⁹ with one region⁵⁰ proposing a one per cent of the retail price of commercial income net revenue from products resulting from the utilization of DSI ensured by developed country Parties, a Party⁵¹ proposing a reduction of the contribution from a product if the origin of the DSI used in that product is made public and another submission⁵² proposing a reduction in the percentage in the case where the company foregoes intellectual property rights for that particular product;

(b) A percentage varying according to the dependence of the product on DSI,⁵³

(c) A combination of the benefits from the use of DSI and either the level of development of the country,⁵⁴ or existing contribution to non-monetary benefit-sharing;⁵⁵

³⁷ Switzerland, United Kingdom.

³⁸ African Group, Uganda.

³⁹ African Group, Algeria, Canada, China, Colombia, Uganda, AIR Trust, ICC, IIFB.

⁴⁰ Norway.

⁴¹ African Group.

⁴² Pakistan.

⁴³ Japan, Switzerland, United States.

⁴⁴ Canada, Norway, TWN.

⁴⁵ Colombia, TWN.

⁴⁶ African Group, Algeria.

⁴⁷ Canada.

⁴⁸ AIR Trust.

⁴⁹ ICC.

⁵⁰ African Group.

⁵¹ Brazil.

⁵² Vogel.

⁵³ Japan.

⁵⁴ Algeria, Jordan.

⁵⁵ Japan.

(d) When an activity contributes to the objectives of the Convention, the company could be exempted at least in part from their benefit-sharing obligation from use of DSI, for example in the use of microorganisms to clean up oceans;⁵⁶

(e) A royalty percentage from commercialization, which could vary according to the type of intellectual property;⁵⁷

(f) Biodiversity fees and biocredits.⁵⁸ Thereby filling the gap for conservation in biodiversity-rich but carbon-poor systems and complementing the climate change mitigation system based on carbon emissions;

(g) An estimation of the value of the global biodataset, which would also help harmonize the benefit-sharing obligation across multiple fora, maximizing user compliance and minimizing transaction costs. This unit should not be an individual sequence as product development processes are too complex.^{59,60}

19. In terms of the frequency of the payments, some commented that:

(a) The flow of the funds should be steady and predictable for the users and the global fund,⁶¹

(b) Recurring payments would help a predictable flow of funds, citing the example of the Partnership Contribution of the Pandemic Influenza Preparedness Framework.⁶²

20. A Party⁶³ indicated that more discussion was needed to decide whether the contribution from industry would be a one-off payment for a use of DSI or a product, or whether it would be an ongoing payment according to the benefits accrued over time.

21. Other comments on the level and timing of contribution mentioned that:

(a) The impact of the contributions on the national budget should be minimal;⁶⁴

(b) The impact on businesses should be minimal;⁶⁵

(c) The generation of financial returns should be maximized if contributions remained in the fund for any significant length of time.⁶⁶

22. In terms of the process to make those decisions on contribution, some submissions stated that this was a matter for the Conference of the Parties to the Convention on Biological Diversity,⁶⁷ while another suggested this was up to national authorities and national laws on access to genetic resources and benefit-sharing.⁶⁸

3. Role and interests of industry (issue (n))

23. Additional information on views regarding the role and interests of industry is presented in section D.3, in the grouping on governance and institutions.

⁵⁶ Japan.

⁵⁷ Vogel.

⁵⁸ Pantheon-Assas.

⁵⁹ For example, Deep Mind uses over 300 million sequences and hundreds of thousands of 3-dimensional crystal structures to predict virtual protein structures for drug discovery.

⁶⁰ Halewood and others.

⁶¹ Brazil.

⁶² Australia.

⁶³ Australia.

⁶⁴ Belarus.

⁶⁵ ICC.

⁶⁶ Australia.

⁶⁷ African Group, Algeria.

⁶⁸ Burundi.

24. The roles of industry in the multilateral mechanism on DSI was centred around the notions that industry could be a key contributor to the global fund,⁶⁹ and could also benefit society through the voluntarily release of private data.⁷⁰

25. However, some of the concerns evolved around:

(a) Industry's lack of awareness of the global fund and therefore its lack of contribution, particularly voluntary ones;⁷¹

(b) The potential need for an independent confirmation of the level of contribution of DSI to a certain product or research result for the calculation of contributions to the multilateral mechanism;⁷²

(c) A need for the disaggregation of industry by region and sectors as they might not share all the same concerns and interests;⁷³

(d) The creation of products using DSI often results from a complex process involving several companies, as well as academic or public institutions, making calculations of contributions possibly difficult.⁷⁴

26. On the needs of industry vis-à-vis the multilateral mechanism and global fund, several points where raised:

(a) The need for clear guidance on contribution provision to the fund;⁷⁵

(b) A simple, low-cost, legally certain compliance mechanism;⁷⁶

(c) Industry's right to privacy and respect for intellectual property and protection of trade secrets.⁷⁷

27. The idea of an acknowledgement of the entities which contribute to the global fund was viewed as an incentive for their participation by a Party,⁷⁸ while some organizations⁷⁹ mentioned it could place an excessive expectation on those companies that do not have to or want to participate in the multilateral mechanism.

B. Disbursement of the funds

28. This second grouping of topics concerns what happens to the monetary contributions to the global fund. Some of the aspects around indigenous peoples and local communities in the multilateral mechanism presented here are complemented by remarks in section D.2.

1. Disbursement of monetary benefits, including information on geographical origin as one of the criteria (issue (e))

29. This issue was addressed in most submissions and the following key areas were identified: who gets the funding, what are the criteria for disbursement, how are the funds distributed, what is funded, and who decides on priorities.

⁶⁹ New Zealand.

⁷⁰ Canada.

⁷¹ New Zealand.

⁷² Japan.

⁷³ European Union and its member States, TWN.

⁷⁴ ICC.

⁷⁵ African Group.

⁷⁶ JPMA.

⁷⁷ Canada.

⁷⁸ Norway.

⁷⁹ JPMA, JBA.

(a) Who gets funding?

30. One Party⁸⁰ suggested looking at the example of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) where funds are primarily for farmers in developing countries and economies in transition.

31. There were various proposals for who should get funding from the global fund:

(a) Some proposed that benefits could go back to the providers of the resources,⁸¹ with some variations, including:

(i) At least for genetic resources in developing countries;⁸²

(ii) With the help of a track and trace system,⁸³ including through national databases⁸⁴ or a mandatory reference to the country of origin in public databases;⁸⁵

(iii) The provider could be a country of origin of the genetic resource, or a community holding the associated traditional knowledge;⁸⁶

(b) It was suggested that, as stewards of conservation and sustainable use of biodiversity, indigenous peoples and local communities should be the main beneficiaries of the global fund,⁸⁷ with some specifying that indigenous peoples and local communities from all countries, including developed ones, should be able to get access to funding;⁸⁸

- Streams of funding for various recipients, such as indigenous peoples and local communities or low- and middle-income countries would guarantee a periodic support through one or more topical streams for projects, such as geographical origin, provider entity, contribution to DSI database, and others as necessary. This guaranteed income would help some groups in accepting a solely multilateral system with no reliance on tracking and tracing.⁸⁹ An organization⁹⁰ gave the example of 20 per cent of the funds towards the known geographical origin of the genetic resources, 30 per cent towards the most vulnerable areas, and others to be determined.

(c) The idea of an opt-in/opt-out of the multilateral mechanism for Parties who have bilateral ABS legislation that includes DSI is further discussed in the context of criteria for distribution of monetary benefits immediately below and is also related to considerations in section E on relation to other approaches and systems.

(b) Criteria for distribution of monetary benefits

32. Several criteria were advanced for the distribution of monetary benefits:

(a) Regional balance;⁹¹

(b) Country's contribution to the DSI database;⁹²

⁸⁰ Norway.

⁸¹ Algeria, Belarus, Brazil, China, Colombia, Pakistan.

⁸² Brazil.

⁸³ Pakistan.

⁸⁴ Belarus.

⁸⁵ Algeria, African Group.

⁸⁶ Burundi.

⁸⁷ African Group, Australia, Burundi, Canada, European Union and its member States, Jordan, Norway, Pakistan, Uganda, United Kingdom, AIR Trust, ICC, IIFB, WSI.

⁸⁸ Japan, AIR Trust, IIFB.

⁸⁹ CGIAR, Halewood and others.

⁹⁰ IIFB.

⁹¹ United States.

⁹² DFG, WSI.

(c) Country's contribution to DSI usage through available information on geographical origin of genetic resource, but without tracking and tracing, as it is undesirable.⁹³ This could help calculate contributions to small island developing States as they tend to have proportionally high biodiversity and low capacity compared to others;⁹⁴

(d) Needs of the countries, as identified through, for example the System for Transparent Allocation of Resources of the Global Environment Facility (GEF),⁹⁵ a new vulnerability index/measure,⁹⁶ the use of national biodiversity strategies and action plans, including the needs of indigenous peoples and local communities,⁹⁷ or a system of minimum payments for low- and middle-income countries;⁹⁸

(e) Habitat decline for species of commercial interest;⁹⁹

(f) Level of carbon dioxide emissions reduction beyond national commitment under the United Nations Framework Convention on Climate Change;¹⁰⁰

(g) Whether or not a Party opted into the multilateral fund, as countries opting for a bilateral modality should not benefit from the global fund, or at least not at the same level as others;¹⁰¹

(h) Whether or not a Party is part of transboundary systems or the route of migratory species,¹⁰² in which case benefits from their DSI is split with others sharing the same ecosystem or migratory route.¹⁰³

Geographical origin as a criterion

33. Several submissions stated that tracking and tracing should not be linked to disbursement of benefits, and elaborated that:

(a) Tracking and tracing is difficult and would be costly, thereby resulting in reducing actual shared benefits;¹⁰⁴

(b) An increase in geographical origin information would not solve the challenge of making a direct link between the value realized from the use of particular digital sequences from particular providers and the monetary (or non-monetary) benefits to be shared;¹⁰⁵

(c) Taking geographical origin into consideration in the disbursement of monetary benefits would be challenging technically, but also when considering the movement of species, invasive species,¹⁰⁶ non-endemic species, or sequences found among different taxa;¹⁰⁷

(d) Geographical origin as a criterion could raise the risk for the deposition of fake data in public databases so as to increase benefits for targeted countries,¹⁰⁸ although one Party proposed that this could be addressed through a verification of the identity of the users of databases.¹⁰⁹

⁹³ European Union and its member States, Jordan, New Zealand, IIFB.

⁹⁴ Australia.

⁹⁵ Australia.

⁹⁶ Australia, AIR Trust.

⁹⁷ European Union and its member States.

⁹⁸ Halewood and others.

⁹⁹ Vogel.

¹⁰⁰ Vogel, Ruiz.

¹⁰¹ ICC.

¹⁰² African Group.

¹⁰³ Algeria.

¹⁰⁴ Japan, Norway, Switzerland.

¹⁰⁵ United Kingdom.

¹⁰⁶ Benin.

¹⁰⁷ Canada.

¹⁰⁸ Japan, JPMA.

¹⁰⁹ Algeria.

34. On the other hand, a system of track and trace was seen as potentially helpful to enforce payment of benefits from the use of DSI,¹¹⁰ with payments from those DSI with no geographical origin going to conservation and sustainable use projects,¹¹¹ facilitation of collaborations between scientists, particularly users and providers,¹¹² prioritization of projects on lands of indigenous peoples and local communities,¹¹³ and good scientific practice in general.

35. Several submissions also emphasized the need for a transparent,¹¹⁴ agile and simple process for timely disbursement,¹¹⁵ sharing guidelines on disbursement widely, including with industry, which is seen as encouraging their involvement.¹¹⁶

(c) How are funds distributed?

36. Several submissions presented options for models of disbursement:

(a) Disbursement could be through representative bodies of the local communities,¹¹⁷ including indigenous peoples and local communities¹¹⁸ and rural communities, which require the building of capacity to govern those funds at the community level;¹¹⁹

(b) Disbursement could be through recipient countries, who then redistribute those funds to indigenous peoples and local communities;¹²⁰

(c) Other mechanisms.¹²¹

(d) What is funded?

37. A number of submissions¹²² mentioned that projects or actions financed by the global fund should target conservation and sustainable use of biodiversity, with various submissions proposing specific modalities:

(a) Funding should be competitive and project-based;¹²³

(b) Funded projects should be in line with the ecosystem- approach;¹²⁴

(c) Funding should prioritize projects with synergies with relevant Sustainable Development Goals, including public health and security¹²⁵ or with the Kunming-Montreal Global Biodiversity Framework.¹²⁶

38. A Party¹²⁷ stated that the funding should go to the provider country, who would decide to support national priorities at its own discretion.

¹¹⁰ Algeria.

¹¹¹ China.

¹¹² Burundi.

¹¹³ Brazil.

¹¹⁴ African Group, Algeria, ICC, IIFB.

¹¹⁵ ICC.

¹¹⁶ African Group.

¹¹⁷ Australia.

¹¹⁸ DSI-SN.

¹¹⁹ IIFB.

¹²⁰ Australia.

¹²¹ Australia.

¹²² Algeria, Australia, Brazil, European Union and its member States, Japan, Switzerland, Uganda, CABI, CGIAR, DFG, Ginkgo Bioworks, IIFB, JBA, Pantheon-Assas, VLIR.

¹²³ Algeria, Japan, Switzerland, Uganda, CGIAR, JBA.

¹²⁴ Brazil, European Union and its member States, CABI, Pantheon-Assas.

¹²⁵ European Union and its member States.

¹²⁶ VLIR.

¹²⁷ Colombia.

39. Concerns were expressed around the possibility that the application process could be complex and the challenges this could cause.¹²⁸

40. Several ideas were proposed as to how to decide on areas of priority for lines of funding and for projects or activities, with several submissions proposing a mix of tools to set priorities:

(a) The Permanent Forum on Indigenous Issues could support the selection of projects;¹²⁹

(b) Funding priorities could be based on outcomes from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES);¹³⁰

(c) Funding priority could be based on scientific evidence and proposal merit;¹³¹

(d) Funding priorities could be on the goals of the project furthering conservation and sustainable use of biodiversity;¹³²

(e) Funding priorities could be based on outcomes from the International Union for Conservation of Nature evaluation of threatened ecosystems as the method being developed for the allocation of biocredits for the voluntary market;¹³³

(f) Funding priorities could be set by the Conference of Parties;¹³⁴

(g) Developing countries and indigenous peoples and local communities identify their own conservation and sustainable use priorities;¹³⁵

(h) Some projects could be funded according to rapidly emerging issues.¹³⁶

2. The role, rights and interests of indigenous peoples and local communities, including associated traditional knowledge (part of issue (m))

41. One Party¹³⁷ recalled that the multilateral mechanism as a whole, including the global fund, should fulfil paragraph 9(i) of decision 15/9.

42. In terms of criteria for the allocation of funds, one submission¹³⁸ proposed a criterion for the selection of projects as “enables the conservation and development of traditional knowledge linked to genetic resources” but another¹³⁹ explained that traditional knowledge is difficult to allocate owing to independent ethnobotanical convergence -- a common phenomenon where multiple distant countries independently use related plants for the same purpose -- making it difficult to assign the origin of a certain traditional knowledge to a particular active component. This stakeholder and another¹⁴⁰ proposed that a redistribution to all indigenous peoples and local communities regardless of the origin of the traditional knowledge would avoid creating conflict and jurisdiction shopping.

43. Additional remarks on indigenous peoples and local communities are addressed under other sections of this synthesis in the context of other issues from the annex to decision 15/9.

¹²⁸ Australia, Switzerland.

¹²⁹ Pantheon-Assas.

¹³⁰ Uganda.

¹³¹ ICC.

¹³² ICC.

¹³³ Pantheon-Assas.

¹³⁴ Algeria, TWN.

¹³⁵ African Group, European Union and its member States, AIR Trust.

¹³⁶ IIFB.

¹³⁷ Switzerland.

¹³⁸ Algeria.

¹³⁹ Endevo Biosciences.

¹⁴⁰ Ruiz.

Links with non-monetary benefits

44. Consideration of non-monetary benefits in the disbursement of the monetary was proposed to be either in an equal manner,¹⁴¹ or at a higher value than monetary benefits.¹⁴²

45. A Party commented that non-monetary benefits also involved a cost¹⁴³ while an organization suggested that non-monetary benefits should be independent of the value chain.¹⁴⁴ A Party¹⁴⁵ called to consider monetary and non-monetary benefits as complementary towards the goals of the fund.

46. The topic of non-monetary benefit-sharing is also discussed in section C.1.

C. Non-monetary benefit-sharing**1. Non-monetary benefit-sharing, including information on geographical origin as one of the criteria (issue (f)) and capacity development and technology transfer (issue (h))**

47. This section addresses a number of themes on non-monetary benefits, namely triggering points, possible goals, types of non-monetary benefits, processes around capacity-building and technology transfer, and criteria for the selection of non-monetary benefit-sharing activities.

(a) Triggering point

48. A number of potential trigger points for the sharing of non-monetary benefits were suggested:

- (a) Application for research funds;¹⁴⁶
- (b) Collection and surveying of genetic resources;¹⁴⁷
- (c) Export of biological resources;¹⁴⁸
- (d) Third-party transfer;¹⁴⁹
- (e) Transfer of research results;¹⁵⁰
- (f) Sequencing of the biological resource and deposition in a database;¹⁵¹
- (g) Explorative research, with a notification system to the country of origin,¹⁵² facilitating collaboration and leadership;¹⁵³
- (h) Emergence of a by-product, encouraging collaboration with the country of origin;¹⁵⁴
- (i) Reasonable anticipation of product/process development, facilitating the involvement of the country of origin;¹⁵⁵
- (j) Commercialization of a product, with production rights and royalties for the country of origin.¹⁵⁶

¹⁴¹ China, DSI-SN, ICC.

¹⁴² Türkiye.

¹⁴³ Switzerland.

¹⁴⁴ WSI.

¹⁴⁵ Algeria.

¹⁴⁶ Pakistan, Alliance Germany, CGIAR.

¹⁴⁷ African Group.

¹⁴⁸ African Group.

¹⁴⁹ African Group.

¹⁵⁰ African Group.

¹⁵¹ Canada.

¹⁵² Brazil.

¹⁵³ TWN.

¹⁵⁴ TWN.

¹⁵⁵ TWN.

¹⁵⁶ TWN.

49. One organization¹⁵⁷ argued that there is no need to develop triggers other than requiring open access and another¹⁵⁸ stated that the sustainable bioeconomy already fosters biodiversity by replacing harmful incumbent products.

(b) Goal of non-monetary benefit-sharing

50. Submissions formulated the goals for the non-monetary benefit-sharing activities, as follows:

- (a) Equity in research relationships;¹⁵⁹
- (b) Contribution to the Sustainable Development Goals and national biodiversity strategies and action plans;¹⁶⁰
- (c) Facilitation of the identification, utilization, monitoring and management of biodiversity;¹⁶¹
- (d) Narrowing the gap in the ability to conserve and sustainably use biodiversity through research and innovation¹⁶² so that all Parties can benefit from the use of DSI;¹⁶³
- (e) Alignment with the decision of the Conference of the Parties on capacity-building and development and technical and scientific cooperation;¹⁶⁴
- (f) Alleviate some of the barriers undermining the capacity of developing countries to fully benefit from DSI,¹⁶⁵ such as the cost of laboratory reagents, infrastructure for DSI research, Internet connectivity, barriers to technology transfer, professional opportunities lacking in developing countries;
- (g) Sector-specific goals such as:
 - (i) Improving public health outcomes, including new vaccines,¹⁶⁶ public health capacity and technology transfer¹⁶⁷ and disease surveillance;¹⁶⁸
 - (ii) Improving agriculture and food security;¹⁶⁹
 - (iii) Successfully implementing the Global Taxonomy Initiative through increased open data in global taxonomic information systems.¹⁷⁰

51. One Party, on the other hand, explained that the distribution of non-monetary benefits would not be applicable as it was a monetary fund that was being created and the expectation was for the sharing of monetary benefits.¹⁷¹ They added that if the criterion was maintained, then it should be at the discretion of each provider country whether it wished to receive monetary or non-monetary benefits.

¹⁵⁷ DSI-SN.

¹⁵⁸ Gingko Bioworks.

¹⁵⁹ CABI.

¹⁶⁰ CETAF, DSI-SN, SPNCH.

¹⁶¹ African Group, Uganda.

¹⁶² Canada, United Kingdom, CGIAR, ICC, WSI.

¹⁶³ Algeria, Norway, CABI, CGIAR, DSI-SN, ICC.

¹⁶⁴ African Group, United Kingdom.

¹⁶⁵ Brazil.

¹⁶⁶ Australia, United Kingdom.

¹⁶⁷ Australia.

¹⁶⁸ WSI.

¹⁶⁹ Australia.

¹⁷⁰ CETAF, NHM-UK, SPNCH.

¹⁷¹ Colombia.

(c) Types of non-monetary benefits

52. The open sharing of data was mentioned as a non-monetary benefit in several submissions,¹⁷² with tools specified as:

- (a) Acknowledgement of the source of the original genetic resource from which DSI was extracted, including indigenous peoples and local communities affiliation. For widely distributed sequences, such acknowledgement might only indicate the country where the DSI was first uploaded;¹⁷³
- (b) Maintenance and smooth operation of the International Nucleotide Sequence Database Collaboration (INSDC);¹⁷⁴
- (c) Creation of common open access knowledge platforms;¹⁷⁵
- (d) Awareness-raising activities on the potential of the utilitarian aspects of genetic resources from technological advancement;¹⁷⁶
- (e) Support for countries to create their national databases on DSI;¹⁷⁷
- (f) Support for the creation or maintenance of regional gene banks/databases/sequence centres;¹⁷⁸
- (g) Expansion and strengthening of database infrastructure in developing countries;¹⁷⁹
- (h) Sharing of germplasm and associated DSI, but not necessarily sharing of genetically modified organisms to safeguard the intellectual property rights of breeders and institutes;¹⁸⁰
- (i) Promotion of the sharing of data and secondary use;¹⁸¹
- (j) Encouraging the inclusion of geographical information when submitting DSI;¹⁸²
- (k) Good practice to include biocultural and traditional knowledge labels to DSI submissions;¹⁸³
- (l) Encouraging open-access science journals.¹⁸⁴

53. Collaborative research and scientific and technical cooperation with local partner universities in developing countries¹⁸⁵ was also mentioned as possible non-monetary benefits to be shared, with examples, such as:

- (a) South-North and South-South cooperation;¹⁸⁶
- (b) Joint publications;¹⁸⁷

¹⁷² Brazil, Japan, United States, alliance of universities in Germany, CABI, DFG, DSI-SN, SCJ, SPNCH, DOALOS, VIB.

¹⁷³ Canada.

¹⁷⁴ Canada, Japan.

¹⁷⁵ Canada, Switzerland, DFG, TWN.

¹⁷⁶ African Group, DSI-SN.

¹⁷⁷ African Group, Algeria.

¹⁷⁸ European Union and its member States.

¹⁷⁹ Brazil.

¹⁸⁰ Pakistan.

¹⁸¹ Canada, CETAF, SPNCH, VIB.

¹⁸² United Kingdom, CABI, NHM-UK, WSI.

¹⁸³ United Kingdom, CABI, NHM-UK, WSI.

¹⁸⁴ alliance of universities in Germany.

¹⁸⁵ Algeria, Brazil, China, CGIAR, DFG, DSI-SN, NHM-UK, TWN.

¹⁸⁶ African Group.

¹⁸⁷ CABI, DFG, TWN.

- (c) Sharing of research results as agreed with national and intergovernmental authorities;¹⁸⁸
 - (d) Inclusive, dynamic cooperation with individual scientists and at multiple levels with institutions;¹⁸⁹
 - (e) Collaboration with indigenous peoples and local communities;¹⁹⁰
 - (f) Collaboration and participation in product development, including through agreements in mutually agreed terms;¹⁹¹
 - (g) Collaboration between collections.¹⁹²
54. Capacity-building and technology transfer are often considered forms of non-monetary benefit-sharing.
55. A number of capacity-building needs were identified:
- (a) Financing research and finding partnership opportunities in developing countries;¹⁹³
 - (b) Human resources and institutions needed to build programmes to use DSI, genetic resources and traditional knowledge;¹⁹⁴
 - (c) Regulatory compliance for researchers and institutions;¹⁹⁵
 - (d) Data analytics, bioinformatics, data management and artificial intelligence;¹⁹⁶
 - (e) Capacity for developing countries to sequence their own genetic diversity, which would support other goals and targets in the Kunming-Montreal Global Biodiversity Framework;¹⁹⁷
 - (f) Create joint laboratory, field stations, research infrastructure, education, and training;¹⁹⁸
 - (g) Data governance and database management.¹⁹⁹
56. Examples of possibilities for technology transfer²⁰⁰ identified in the submissions were the:
- (a) Strengthening of global genomics infrastructure;²⁰¹
 - (b) Development of open-source software tools to facilitate the analysis and management of DSI;²⁰²
 - (c) Purchase of computers and equipment for the generation, access to and use of DSI;²⁰³
 - (d) Specialized technology transfer for marine technologies.²⁰⁴
57. Some activities specifically targeting indigenous peoples and local communities²⁰⁵ were discussed:

¹⁸⁸ TWN.

¹⁸⁹ Brazil, CABI, CGIAR, ITPGRFA.

¹⁹⁰ Canada, AIR Trust, IIFB, WSI.

¹⁹¹ TWN.

¹⁹² CABI, NHM-UK.

¹⁹³ Brazil, WSI.

¹⁹⁴ Burundi.

¹⁹⁵ Pakistan.

¹⁹⁶ Algeria, Brazil, Pakistan, DSI-SN, NHM-UK, WSI.

¹⁹⁷ European Union and its member States.

¹⁹⁸ CABI, CETAF, DFG, SPNCH.

¹⁹⁹ Algeria.

²⁰⁰ Algeria, Brazil, Burundi, Canada, CABI, CETAF, CGIAR, DFG, DSI-SN, SPNCH, TWN.

²⁰¹ CGIAR, WSI.

²⁰² Pakistan.

²⁰³ Canada, CETAF, DFG, DSI-SN, SPNCH.

²⁰⁴ DOALOS.

²⁰⁵ Burundi, IIFB.

- (a) Collective action for customary sustainable use, biodiversity guardianship and stewardship;
- (b) Legal and technical resources for land demarcation and titling;
- (c) Language and linguistic diversity preservation programmes;
- (d) Enhancement of intergenerational protocols for the transmission of traditional knowledge;
- (e) Characterization and valuation of genetic resources and traditional knowledge;
- (f) Culturally appropriate capacity-building for project writing, design, application, administration, accounting, accountability, performance, and reporting.

58. A Party expressed the view that capacity-building and technology transfer should not undermine intellectual property rights.²⁰⁶ They stated that any commitments on technology transfer would need to clarify that it is to be done under mutually agreed terms.

(d) Process for capacity-building and technology transfer activities

59. Some submissions²⁰⁷ highlighted that non-monetary benefit-sharing was important and should be the focus of negotiations.

60. Several organizations²⁰⁸ mentioned that a high-level overarching strategy on capacity-building led by the Convention on Biological Diversity would help avoid duplication with other institutions and address large-scale inequities in global genomics capacity, infrastructural barriers, and low research administration function.

61. Many submissions²⁰⁹ suggested various principles to guide non-monetary benefits and their financing in the multilateral mechanism. They stated that activities:

- (a) Should support research led by indigenous peoples and local communities;²¹⁰
- (b) Could facilitate public-private partnerships, including networking activities;²¹¹
- (c) Should include courses on DSI issued under the Convention on Biological Diversity and delivered to universities;²¹²
- (d) Could go to individuals or institutions;²¹³
- (e) Should involve indigenous peoples and local communities in decision-making;²¹⁴
- (f) Should come from allocation of resources for project-based work;²¹⁵
- (g) Should result from the equitable distribution of funds among those who would benefit the most from the outcome of the activities, as well as the activities themselves;²¹⁶
- (h) Should draw upon existing initiatives, such as the Biodiversity Finance Initiative/ Organization for Economic Co-operation and Development (OECD) approach to evaluate existing

²⁰⁶ Canada.

²⁰⁷ CETAF, NHM-UK, SPNCH, UNEP.

²⁰⁸ DFG, WSI.

²⁰⁹ Algeria, Brazil, Burundi, Canada, CETAF, CGIAR, DFG, DSI-SN, SPNCH, WSI.

²¹⁰ Canada.

²¹¹ Brazil, African Group.

²¹² Pakistan.

²¹³ African Group, Algeria, Burundi.

²¹⁴ Canada, AIR Trust.

²¹⁵ Australia.

²¹⁶ Australia.

key research infrastructure,²¹⁷ international partnerships such as CABANA (Capacity-building for bioinformatics in Latin America) and SATREPS (Japan International Cooperation Assembly),²¹⁸ universities and their experience with memoranda of understanding, agreements, academic exchanges, among others,²¹⁹ ITPGRFA²²⁰ or the Global Biodata coalition for the mapping of partnership opportunities;²²¹

(i) Should not be limited to DSI as it is of limited practical relevance for the conservation and sustainable use of biodiversity.²²²

62. A Party²²³ stated that financial support for capacity development and technology transfer should come from all sources, including domestic, international, public, and private sources while other submissions²²⁴ suggested that the financing come directly from the global fund on DSI, with the potential for voluntary contributions. Some submissions²²⁵ stated that the development of guidelines for the disbursement of non-monetary benefits will help industry support their engagement with indigenous groups.

63. A number of submissions noted that academia and industry could have a role in capacity-building, scientific cooperation and technology transfer.²²⁶

(e) Criteria for the selection of non-monetary benefit-sharing activities

64. Some submissions²²⁷ developed the idea of needs-based criteria, with the involvement of indigenous peoples and local communities and provider countries in defining their own needs while a non-Party²²⁸ suggested to target countries providing large volumes of sequence data in public databases but being proportionally under-represented as authors of research articles.

65. An organization²²⁹ highlighted that cost-effectiveness of the activity or benefit should be taken into consideration.

66. On the topic of including geographic origin as a criterion for the distribution of non-monetary benefits, submissions presented opposing views:

(a) Some submissions²³⁰ called for the inclusion of geographical origin/distribution data as part of DSI records in databases as a criterion for disbursement, but one organization²³¹ noted that INSDC has mandated for geolocation and date/time in sample collection metadata for DSI submissions, except for endangered and rare species in March 2023.²³² In addition, a Party²³³ called for holders of traditional knowledge to be linked to DSI through the use of biocultural labels;

(b) Other submissions²³⁴ called for the decoupling of geographical origin and benefit-sharing as it would go against the intention of the multilateral mechanism, with some

²¹⁷ CETAF, SPNCH.

²¹⁸ Brazil.

²¹⁹ Ruiz.

²²⁰ CGIAR.

²²¹ Brazil.

²²² IIFB.

²²³ Japan.

²²⁴ Canada, ICC.

²²⁵ New Zealand, Basecamp Research, NHM-UK.

²²⁶ African Group, Brazil, Switzerland, CGIAR, ICC.

²²⁷ Australia, Brazil, Alliance Germany, ICC, IIFB, CETAF, SPNCH.

²²⁸ United States.

²²⁹ VLIM.

²³⁰ Algeria, Jordan, New Zealand, Vogel.

²³¹ SCJ.

²³² See the announcement at www.insdc.org/news/insdc-spatiotemporal-metadata-minimum-standards-update-03-03-2023/.

²³³ African Group.

²³⁴ Benin, United Kingdom, CETAF, CGIAR, DFG, JPMA, NHM-UK, SPNCH.

submissions²³⁵ proposing a needs-based assessment and targeting of developing countries as beneficiaries. Another submission²³⁶ added that the basis of geographical origin is not realistic, and others²³⁷ warned that it could lead to contamination of databases with fake data to attract more benefits.

2. Linkages between research and technology and the multilateral mechanism on benefit-sharing (issue (o))

67. Submissions expressed concern about the potential impacts of the multilateral mechanism on research and innovation, in particular the hinderance of research and innovation owing to changes in open access,²³⁸ including on public health research,²³⁹ and indirectly on other non-targeted research fields.²⁴⁰

68. However, several submissions described potential positive impact on research and innovation, like the support for research and technology, in particular for conservation and sustainable use of biological diversity,²⁴¹ encouragement of a broader access to and exchange of DSI, with cascading positive consequences for conservation and sustainable use and the development of sustainable bioeconomies,²⁴² the promotion of collaborative research between North and South countries and facilitate technology and knowledge transfer, including the generation of DSI,²⁴³ the support to international agricultural organizations that generate non-monetary benefits, such as improved crops, forages and animal breeds, new and adapted agronomic methods in changing climate, and the promotion of training on DSI,²⁴⁴ helping to narrow the capacity gap.²⁴⁵

69. Looking at how research and innovation can positively impact the multilateral mechanism, a few submissions discussed the hiring of researchers to perform reverse traceability,²⁴⁶ the use of academia to implement non-monetary benefit-sharing,²⁴⁷ the creation of value and technology advances as DSI is used in new ways,²⁴⁸ and the development of the taxonomic infrastructure necessary for the monitoring of the Kunming-Montreal Global Biodiversity Framework.²⁴⁹

D. Governance

70. The governance and mechanisms of the fund were discussed in detail in a number of submissions and are tightly linked to the involvement of indigenous peoples and local communities for its functioning, benefits, and principles. Information on data governance has also been included in this section.

1. Governance of the fund (issue (a))

71. Most submissions that addressed this topic provided detailed suggestions and comments on key questions around the governance of a fund on DSI. One submission called for more capacity-building on governance models.²⁵⁰

²³⁵ African Group, Algeria, Benin, Jordan, Uganda, United Kingdom, NHM-UK.

²³⁶ Japan.

²³⁷ Japan, JPMA, SCJ.

²³⁸ Japan, Norway, LERU, VLIR, Wellcome Sanger Trust.

²³⁹ Australia, BIA.

²⁴⁰ Canada.

²⁴¹ African Group, Switzerland.

²⁴² ICC.

²⁴³ African Group, United Kingdom.

²⁴⁴ CGIAR.

²⁴⁵ Brazil, Burundi, ICC.

²⁴⁶ Brazil, Pakistan.

²⁴⁷ Japan.

²⁴⁸ African Group.

²⁴⁹ Ruiz, Vogel.

²⁵⁰ Burundi.

72. *Goals of the fund.* Numerous²⁵¹ submissions cited conservation and sustainable use of biodiversity as the main objective for the fund, one stakeholder²⁵² added research and technology development of genetic resources and associated traditional knowledge, and one regional group²⁵³ the support of the Sustainable Development Goals.

73. *Fund host.* There were four main proposals for where the fund could be hosted: the financial mechanism for the Convention (i.e. GEF or other entity that might be developed in the future),²⁵⁴ the Global Biodiversity Framework Fund, the Secretariat of the Convention²⁵⁵ or some other type of global fund.²⁵⁶

74. Among those who supported the fund being hosted by GEF, it was suggested that this option would allow for robust governance principles²⁵⁷ and maximization of the generation of financial returns.²⁵⁸ However, concerns were expressed about the ability for GEF to accept voluntary funds²⁵⁹ and whether the hosting of the fund by GEF could lead to its being bound by GEF rules, which could affect direct access to the fund by indigenous peoples and local communities.²⁶⁰

75. Some proposed that the fund could be hosted by the Global Biodiversity Framework Fund,²⁶¹ noting the process under way under GEF to establish the Fund. This would pool DSI-generated revenues with those of the Fund, minimize the administrative burden and avoid the fragmentation of the financial landscape,²⁶² as well as help fulfil the commitments made at the fifteenth meeting of the Conference of the Parties to increase the mobilization of resources through leveraging financial resources from all sources and deploying a full suite of instruments, including new and innovative approaches, such as private capital mobilization and blended finance.²⁶³ In turn, the Fund would have to consider the principles from the decision on DSI and adapt its governance model²⁶⁴ and resource mobilization approach.²⁶⁵

76. *Oversight of the fund.* A number of submissions²⁶⁶ stated that the fund should be under the supervision of the Conference of the Parties to the Convention.

77. *Composition of the governing body.* Suggested representation included:

- (a) Equal regional representation,²⁶⁷ with a suggestion for representatives to be elected by countries from that region;²⁶⁸
- (b) Equal representation between developed and developing countries;²⁶⁹
- (c) Non-Parties could be included as observers;²⁷⁰

²⁵¹ Algeria, China, Pakistan, Uganda, United States.

²⁵² CABI.

²⁵³ European Union and its member States.

²⁵⁴ African Group.

²⁵⁵ Algeria, Uganda.

²⁵⁶ Jordan, Uganda.

²⁵⁷ African Group, Australia, Canada, ICC.

²⁵⁸ African Group, Switzerland.

²⁵⁹ Switzerland.

²⁶⁰ IIFB.

²⁶¹ Australia, European Union and its member States, Switzerland, United Kingdom.

²⁶² European Union and its member States.

²⁶³ Conference of the Parties decision 15/7, para. 17(d).

²⁶⁴ IIFB.

²⁶⁵ European Union and its member States.

²⁶⁶ African Group, Algeria, Canada, Jordan, Uganda, TWN.

²⁶⁷ African Group, Brazil, Colombia.

²⁶⁸ Colombia.

²⁶⁹ Uganda.

²⁷⁰ Switzerland.

- (d) Mirroring the GEF Council;²⁷¹
- (e) Representation of indigenous peoples and local communities, including in decision-making functions,²⁷² with a suggestion of representation from each of the seven sociocultural regions;²⁷³
- (f) Gender balance in the steering committee;²⁷⁴
- (g) Youth representation;²⁷⁵
- (h) Academia representatives;²⁷⁶
- (i) Civil society representatives;²⁷⁷
- (j) Private sector representation.²⁷⁸

78. A Party²⁷⁹ suggested further discussion would be needed on whether all financial contributors to the fund would be represented on the governing body (and thus be involved in decision-making) or whether representatives of the private sector would remain as observers. They flagged that this issue could affect the ability to secure contributions to the fund from a wider variety of sources.

79. *Characteristics and sustainability.* A submission highlighted the importance of transparency in the governance²⁸⁰ of the mechanism and called for the composition of the governance bodies to be publicly communicated.

80. Another characteristic that was mentioned is an agile approach of iterative reporting and adjusting,²⁸¹ included a suggestion²⁸² for a pilot to be reviewed at the eighteenth meeting of the Conference of the Parties for efficacy and efficiency.

81. Other principles included efficiency, practicality, interoperability, and ease of implementation.²⁸³ Principles from paragraphs 9 and 10 of decision 15/9 were highlighted as well.²⁸⁴

2. Role, rights and interests of indigenous peoples and local communities, including associated traditional knowledge (issue (m))

82. Several international obligations towards indigenous peoples and local communities were highlighted in submissions, such as under the Convention on Biological Diversity,²⁸⁵ the United Nations Declaration on the Rights of Indigenous Peoples,²⁸⁶ the Permanent Forum on Indigenous Issues²⁸⁷ and the International Labour Organization.

83. In terms of governance, participation of indigenous peoples and local communities in international discussions, inclusion of the chieftain authorities²⁸⁸ in the guidance on best practices

²⁷¹ Switzerland.

²⁷² African group, Australia, Brazil, New Zealand, United Kingdom, IIFB, AIR Trust, iDSI.

²⁷³ IIFB.

²⁷⁴ Brazil, IIFB.

²⁷⁵ IIFB.

²⁷⁶ ICC.

²⁷⁷ CGIAR.

²⁷⁸ Australia, United Kingdom.

²⁷⁹ Australia.

²⁸⁰ ICC.

²⁸¹ CGIAR, DFG, ICC.

²⁸² CABI, JPMA.

²⁸³ VLIR.

²⁸⁴ European Union and its member States, New Zealand, Switzerland.

²⁸⁵ Switzerland.

²⁸⁶ IIFB, TWN.

²⁸⁷ New Zealand, IIFB.

²⁸⁸ New Zealand.

was emphasized in many submissions.²⁸⁹ Rightsholders were proposed to be a part of governance mechanism for the fund, either as members or as observers.²⁹⁰ An organization²⁹¹ proposed that indigenous peoples and local communities govern the global fund, and a number of submissions²⁹² proposed that indigenous peoples and local communities be a key beneficiary from the use of DSI.

3. Role and interests of industry and academia (issue (n))

84. Some comments on this issue can also be found in section A.3, C and E. This section focuses on the roles and interests of industry and academia in the governance of the multilateral mechanism.

85. Other submissions discussed involving industry and academia in the process on DSI²⁹³ and the design of the global fund,²⁹⁴ as well as in the governance body. This is seen as important to lower the risk of double payments as research and value chains can be very complex²⁹⁵ and ensure that the multilateral mechanism is able to address technological developments in the future.²⁹⁶

86. Some submissions proposed including industry and academia in the governance body of the multilateral mechanism on DSI given their potential role in capacity-building, scientific cooperation and technology transfer.²⁹⁷

4. Monitoring and evaluation and review of effectiveness (issue (i))

87. While one regional group²⁹⁸ stated that the multilateral mechanism should first be defined and operationalized before discussing monitoring and evaluation, several submissions²⁹⁹ discussed a monitoring and evaluation framework that would ensure operating efficiency, fairness and transparency of the fund disbursement, efficacy of the mechanism, and support of an agile mechanism, able to adapt to changes.³⁰⁰ A Party³⁰¹ noted that characteristics of DSI make monitoring of its use difficult, but monitoring of the benefit-sharing mechanism implementation is feasible.

88. Submissions cited creating regular opportunities to consider alternative modalities³⁰² and monitoring potential market distortions³⁰³ as advantages resulting from monitoring the mechanism. It was also suggested that monitoring and evaluation of the effectiveness of the multilateral mechanism would need to contribute to improving methods to ensure the traceability of DSI available in public databases.³⁰⁴

89. A transparent monitoring and reporting³⁰⁵ approach was suggested as needing to be:

(a) Based on performance-based funding models, with independent verification and appropriate allocation of resources;

(b) Integrated into regular operations of the fund by monitoring progress and a system of agency performance indicators;

²⁸⁹ Canada, European Union and its member States, Jordan, New Zealand, United Kingdom, United States, WSI.

²⁹⁰ African Group, Brazil, United Kingdom, Air trust, ICC, IIFB.

²⁹¹ AIR Trust.

²⁹² African Group, Brazil, Norway, United Kingdom, Air Trust, DSI-SN, Halewood and others., ICC, IIFB, WSI.

²⁹³ Burundi, Canada, China, European Union and its member States, Japan, Switzerland, United Kingdom, United States, ICC, JBF.

²⁹⁴ New Zealand.

²⁹⁵ European Union and its member States, Japan, Norway, ICC, JBA.

²⁹⁶ Ruiz.

²⁹⁷ United Kingdom, CGIAR, ICC.

²⁹⁸ European Union and its member States.

²⁹⁹ Canada, Japan, Norway, United Kingdom, CGIAR, DFG, ICC, IIFB, JPMA, LERU, Ruiz.

³⁰⁰ JPMA.

³⁰¹ Japan.

³⁰² Norway.

³⁰³ ICC.

³⁰⁴ Brazil.

³⁰⁵ DFG.

- (c) Evaluated by independent experts;³⁰⁶
- (d) Using verifiable data;³⁰⁷
- (e) A minimal burden on users and providers;³⁰⁸
- (f) The public reporting of milestones for the use of the funds, as well as key performance indicators.³⁰⁹

90. In terms of process and decisions on the modalities of the evaluation and reviewing framework, one organization³¹⁰ proposed a committee with global representation and inclusion of indigenous peoples and local communities, and consultations with DSI users. The idea of setting up a pilot to run in the time between the sixteenth to the eighteenth meeting of the Conference of the Parties³¹¹ or later³¹² was also proposed. It was noted that evaluating effectiveness was also an important consideration in the development of the multilateral mechanism and that the studies requested in paragraph 22(b) and (c) of decision 15/9 would be useful in this regard.³¹³ A regional group expressed the view that final considerations on the timeline and modes for monitoring, evaluation and review of effectiveness could only be done once the multilateral mechanism was fully defined and is operationalized.³¹⁴

91. Several Parties³¹⁵ suggested the monitoring and evaluation mechanism for DSI should be integrated with the one for the Kunming-Montreal Global Biodiversity Framework, under the authority of the Conference of the Parties.³¹⁶ An organization suggested a role for the Subsidiary Body on Implementation in this regard.³¹⁷ Another organization³¹⁸ proposed a baseline for monetary benefits applicable under the Convention, the Nagoya Protocol and the 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 (BBNJ Agreement), and on which to measure any future increase or decrease in benefits, while others argued for a baseline, but also mentioned the need for an agreement on what is to be measured and how.³¹⁹ One region³²⁰ pointed out that an appropriate budget should be allocated for the monitoring and evaluation of the multilateral mechanism.

92. For the monitoring of non-monetary benefits, several submissions³²¹ emphasized the difficulty of defining and quantifying non-monetary benefits, leading to a proposed call³²² for the Conference of the Parties to set a precedent for a reporting framework for it, and one organization³²³ referring to the Long-Term Strategic Framework for Capacity-Building and Development adopted in decision 15/8.

93. Several submissions discussed the need for indicators to be measurable, quantifiable, universally applicable, and comparable, with several citing existing activities that could be taken into

³⁰⁶ Pakistan.

³⁰⁷ African group.

³⁰⁸ LERU, JBF.

³⁰⁹ ICC.

³¹⁰ WSI.

³¹¹ China, CABI, JPMA.

³¹² European Union and its member States.

³¹³ Switzerland.

³¹⁴ European Union and its member States.

³¹⁵ African Group, Algeria, Brazil.

³¹⁶ Algeria.

³¹⁷ TWN.

³¹⁸ Alliance Germany.

³¹⁹ CETAF, SPNCH.

³²⁰ African Group.

³²¹ DFG.

³²² CGIAR.

³²³ DFG.

consideration into the quantification of non-monetary benefit-sharing.³²⁴ Lastly, evaluating the net positive biodiversity outcome,³²⁵ the impact on research and innovation,³²⁶ or that of closing the capacity gap³²⁷ were all suggested in various submissions.

94. The reporting was proposed to be done through national authorities,³²⁸ patent officers,³²⁹ the governing body of the multilateral mechanism,³³⁰ IPBES,³³¹ external independent evaluators mandated by Parties,³³² or through self-reporting in a clearing house, possibly the Access and Benefit-Sharing Clearing-House.³³³

95. Various initiatives that could help inform the Conference of the Parties on the reporting of non-monetary benefits were identified, in particular in the context of ITPGRFA. The Standing Committee on the Funding Strategy and Resource Mobilization under the Treaty has been tasked with developing a methodology for measuring non-monetary benefit-sharing.³³⁴ In 2021, the Food and Agriculture Organization of the United Nations (FAO) developed a Monitoring, Evaluation and Learning framework,³³⁵ and finally, the independent evaluation for the third cycle of the Benefit-sharing Fund of ITPGRFA could also be relevant.³³⁶

96. Several submissions discussed key performance indicators, including some³³⁷ describing a monitoring and evaluation framework as critical for goal C and Target 13, suggesting avoiding duplication³³⁸ by adopting some indicators from the monitoring framework for the Kunming-Montreal Global Biodiversity Framework.³³⁹

97. Additional suggestions included developing indicators for each principle in paragraphs 9 and 10 of decision 15/9,³⁴⁰ including cost-benefit of activities,³⁴¹ various indicators for country, individual or companies' provider activities³⁴² and commercial activity,³⁴³ and funds contributed³⁴⁴ to the mechanism. Indicators were proposed to be classified by source of funds, type of disbursement,³⁴⁵ or even sector, where each sector would develop their own indicators.³⁴⁶

5. Data governance

98. The present subsection consists of the submissions on the issue of principles of data governance, and encompasses topics such as principles of data governance, but also open data and open access, databases and interoperability.

³²⁴ Burundi, Canada, Japan, ICC, JBA, DOALOS.

³²⁵ AIR Trust, IIFB.

³²⁶ IIFB.

³²⁷ ICC.

³²⁸ Algeria, Burundi.

³²⁹ Algeria.

³³⁰ African Group.

³³¹ African Group.

³³² African Group.

³³³ SPNCH.

³³⁴ ITPGRFA.

³³⁵ See the guidance at www.fao.org/3/cb7281en/cb7281en.pdf appendix 3. This guidance enables the Governing Body of the Treaty to assess results, effectiveness, processes, and performance, and promote accountability and learning, knowledge-sharing, lessons learned, and basis for decision-making. ITPGRFA.

³³⁶ www.fao.org/3/cc0867en/cc0867en.pdf

³³⁷ European Union and its member States, United Kingdom.

³³⁸ African Group, Algeria, Canada.

³³⁹ Canada, United States.

³⁴⁰ China, Japan, United Kingdom, ICC, WSI.

³⁴¹ JPBA.

³⁴² Gingko Bioworks.

³⁴³ Pantheon-Assas.

³⁴⁴ Also, Pantheon-Assas .

³⁴⁵ CGIAR.

³⁴⁶ non-exhaustive.

99. The concept of open access emerged from the submissions as one of the main interests of industry and academia in the multilateral mechanism. Comments centred around:

- (a) The maintenance of open access, as any restriction would impact research,³⁴⁷ including pathogen research needed for public health;³⁴⁸
- (b) The assessment of the contribution of open access as a non-monetary benefit overall,³⁴⁹
- (c) The potential impact of different access policies on commercial and non-commercial research.³⁵⁰

(a) Principles of data governance (issue (p))

100. An organization³⁵¹ described data governance as a tool to ensure the right thing is done with the data being collected or processed, and clarified that it is different from data management, which is about making data processing efficient.

Existing data governance guidelines

101. FAIR (findability, accessibility, interoperability, reusability) principles³⁵² were mentioned in a number of submissions. It was explained that the FAIR principles promote open data and point to a multilateral system without distinguishing between commercial and non-commercial use of DSI upstream, but rather downstream. The principles were said to promote one or a few standard licenses to avoid disincentivizing the use of the DSI which mandates benefit-sharing. The concept is as open as possible, as closed as necessary.³⁵³ It was also suggested that FAIR principles need to be defined in the context of DSI, including what metadata are needed for what purposes.³⁵⁴

102. Numerous submissions referred to the CARE (collective benefits, authority to control, responsibility, ethics) principles.³⁵⁵ It was stated that these principles respect and promote data sovereignty of indigenous peoples and local communities³⁵⁶ with the goal of reversing historical power imbalances between indigenous and non-indigenous groups, creating value from data that is grounded in indigenous worldviews, and realizing opportunities for indigenous people within their economy³⁵⁷ as well as supporting self-determination of indigenous peoples and local communities.³⁵⁸ Tools to support those principles include traditional knowledge labels and other communication of cultural protocol which govern the future use of the data.³⁵⁹ It was also indicated that the CARE principles put the duty on researchers to use the data in a responsible manner.³⁶⁰

103. Two submissions³⁶¹ explained that some trigger points can be a source of tension between the FAIR and CARE principles as the decoupling of access from benefit-sharing promoted in the FAIR principles might compromise the need for indigenous peoples and local communities to keep control over their data as stated in the CARE principles. More work is needed with indigenous peoples and

³⁴⁷ Australia, Japan, Jordan, Norway, Pakistan, BIA, CABI, DFG, ICC.

³⁴⁸ Australia.

³⁴⁹ Japan.

³⁵⁰ TWN.

³⁵¹ TWN.

³⁵² Brazil, Canada, China, European Union and its member States, New Zealand, United Kingdom, United States, CETAF, CGIAR, DSI-SN, IIFB, SPNCH, Weizenbaum Institute.

³⁵³ Weizenbaum Institute.

³⁵⁴ Canada.

³⁵⁵ Brazil, Canada, China, European Union and its member States, NZ, United Kingdom, United States, CETAF, CGIAR, DSI-SN, IIFB, SPNCH, Weizenbaum Institute.

³⁵⁶ iDSI, Weizenbaum Institute.

³⁵⁷ New Zealand.

³⁵⁸ Pakistan.

³⁵⁹ New Zealand, DSI-SN.

³⁶⁰ IIFB.

³⁶¹ iDSI, Weizenbaum Institute.

local communities to see if decoupling could be consistent with CARE. An organization³⁶² called for data governance to accommodate indigenous peoples and local communities worldviews.

104. Several other principles were mentioned, such as:

- (a) The recommendation on Enhancing Access to and Sharing of Data of OECD (2021);³⁶³
- (b) The guiding principles for pathogen genome data-sharing of the World Health Organization (WHO) (2022);³⁶⁴
- (c) The First Nations Principles of Ownership, Control Access, Possession;³⁶⁵
- (d) The principle of genetic data sovereignty;³⁶⁶
- (e) Principles for developing data into a public good and for global data-sharing as set out in the the digital economy report “Cross-border data flows and development: For whom the data flow” by the United Nations Conference on Trade and Development (UNCTAD) published in 2021, which provides³⁶⁷
- (f) The right of access to environmental information as set out in the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) and the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazu agreement);³⁶⁸
- (g) The Recommendation on Open Science of UNESCO (2021) which promoted the safe and secure sharing of data between approved users.³⁶⁹

105. An organization³⁷⁰ pointed out that the FAIR, CARE, OECD and UNESCO recommendations are, at most, soft law, and Parties can regulate data as part of exercising their sovereignty.

106. Other instruments and sources of data governance principles were highlighted in various submissions:

- (a) Institutional websites;³⁷¹
- (b) Global datasets such as the Global Biodiversity Information Facility, the Barcode of Life Data Systems or INSDC, which support open and free access to and reuse of all data;³⁷²
- (c) The 2022 “Desirable Characteristics of Data Repositories for Federally Funded Research”³⁷³ from the United States government could inspire a FAIR data governance model.³⁷⁴

Open and Responsible Data Governance framework

107. Several submissions supported the development of Open and Responsible Data Governance (ORDG) that would integrate the FAIR and CARE principles,³⁷⁵ in addition to following the OECD

³⁶² IIFB.

³⁶³ Canada, China, European Union and its member States, Japan, United Kingdom, TWN.

³⁶⁴ Australia.

³⁶⁵ AIR Trust.

³⁶⁶ TWN.

³⁶⁷ SPNCH.

³⁶⁸ DFG.

³⁶⁹ Canada, European Union and its member States, United Kingdom, ICC, IIFB.

³⁷⁰ TWN.

³⁷¹ Alliance of universities in Germany.

³⁷² Alliance of universities in Germany.

³⁷³ Document can be found at www.whitehouse.gov/wp-content/uploads/2022/05/05-2022-Desirable-Characteristics-of-Data-Repositories.pdf

³⁷⁴ United States.

³⁷⁵ iDSI, IIFB, Weizenbaum Institute.

and UNESCO guidelines.³⁷⁶ These guidelines aim at involving the whole-of-society in their common vested interest through an inclusive representation of relevant stakeholders in the design, implementation and monitoring³⁷⁷ of those principles, including vulnerable, underrepresented, or marginalized groups. It was suggested that examples of ORDGs can be found in the Earth Biogenome Project, Local Contexts, and the BBNJ Agreement.³⁷⁸

108. A Party³⁷⁹ called for a repository certification similar to the International Organization for Standardization and CoreTrustSeal, but for the FAIR and CARE principles as a tool needed with the increased number of repositories.

Suggestions for development of guidelines under the Convention on Biological Diversity for DSI data governance

109. Some organizations³⁸⁰ called for one coherent, flexible, scalable, and inclusive data governance, cross-cutting to other instruments, such as FAO, WHO or the BBNJ Agreement, in compliance with international and national legal and ethical requirements of data protection and privacy, especially for human or human-related genetic resources.

110. These principles could:³⁸¹

- (a) Require mandatory country of origin of source material in databases;³⁸²
- (b) Request mandatory reporting formats for research results;
- (c) Subject large-scale users to data audit and inspection;
- (d) Have the right of deletion, destruction, or repatriation of data if necessary;
- (e) Limit the use to peaceful purposes that shall not lead to biosecurity, biosafety and biopiracy problems.

111. Several submissions proposed ways to address the rights of indigenous peoples and local communities through data governance, namely:

- (a) A notification system to inform indigenous peoples and local communities about the use of DSI related to genetic resources collected on their land or associated with their traditional knowledge;³⁸³
- (b) A mechanism of data governance where the use of DSI from indigenous peoples and local communities lands or traditional knowledge should benefit the lives of indigenous peoples and local communities;³⁸⁴
- (c) Encouraging the use of biocultural labels³⁸⁵ and the labelling of the lands, waters, and territories of indigenous peoples and local communities;³⁸⁶
- (d) Requesting the submission of a proof of compliance with ABS and the rights of indigenous peoples and local communities to the data depositor.³⁸⁷

³⁷⁶ NHM-UK.

³⁷⁷ IIFB.

³⁷⁸ iDSI.

³⁷⁹ Canada.

³⁸⁰ CABI, DSI-SN, IIFB.

³⁸¹ TWN.

³⁸² Also United Kingdom, Alliance Germany, TWN.

³⁸³ IIFB.

³⁸⁴ CABI.

³⁸⁵ DFG.

³⁸⁶ IIFB.

³⁸⁷ CGIAR.

112. A Party³⁸⁸ warned of the equity imbalances in data-sharing owing to differences in the capacity of different States to share DSI or access the multilateral mechanism, and one organization³⁸⁹ called for capacity-building for indigenous peoples and local communities on skills needed for digital data production and management, and another Party³⁹⁰ for capacity-building on data governance.

(b) Metadata and interoperability

Metadata and associated information

113. A Party³⁹¹ explained the importance of considering the different utilizations of DSI such as comparison of genomic data information, or the fact that associated information can help maximize the utilization of DSI. One organization³⁹² mentioned that DSI governance should include the comprehensive metadata, such as spatiotemporal information, associated traditional knowledge and permit number. Another organization³⁹³ advocated for a specialized metadata repository to host traditional knowledge and one Party³⁹⁴ called for a tool to identify providers of traditional knowledge, all in the view to increasing the longevity of the data and maximizing its scientific utility for future uses.

114. However, one organization³⁹⁵ expressed the view that metadata can be easily manipulated for gain as INSDC cannot check and guarantee its accuracy, and this could pose a threat to the multilateral mechanism, as well as the integrity of data itself, including for the preservation of intellectual property rights.

Interoperability

115. Several submissions³⁹⁶ discussed the need for databases to be interoperable to allow the free flow of data among them. One organization³⁹⁷ suggested the need for interoperable information systems that could specifically support the sharing of benefits.

116. Several Parties³⁹⁸ drafted a set of principles for data management and repositories, as follows:

(a) Transparency: the multilateral mechanism should provide information on databases, their assets, type of data, and purpose of data collection. This would enhance the trust between users and providers;

(b) Accountability: a culture of accountability would encourage data stewardship and disclosure in data catalogues;

(c) Integrity: metadata should be accurate, relevant, in compliance with policies and regulations critical in ensuring successful data governance;

(d) Collaboration: transparent collaboration would be guided by effective standards and metrics;

(e) The multilateral mechanism would support the creation of national databases in all countries, including developing countries;

³⁸⁸ Australia.

³⁸⁹ IIFB.

³⁹⁰ Burundi.

³⁹¹ China.

³⁹² DSI-SN.

³⁹³ Pantheon-Assas.

³⁹⁴ Burundi.

³⁹⁵ JBA.

³⁹⁶ Australia, JBF.

³⁹⁷ CGIAR.

³⁹⁸ African Group, Uganda.

(f) The data should support innovation and discovery, in respect with the rights of indigenous peoples and local communities;

(g) The multilateral mechanism would offer a map of various public and private databases to facilitate access to and use of DSI, through a clearing-house mechanism;³⁹⁹

(h) The mechanism would ensure data quality, reproducibility, transparency, ethics, accountability, and standardization.

117. One submission⁴⁰⁰ suggested encouraging the coordination between repositories for a common approach to assigning metadata to DSI, thereby increasing its discoverability across organizations and research domains, and enhancing the utility of public data.

(c) Databases

118. Remarks on databases revolved around two main points:

(a) The multilateral mechanism could encourage the creation of national databases⁴⁰¹ in which DSI from national genetic resources would be deposited,⁴⁰² and this in turn could help the tracking and tracing needed for the disbursement of monetary benefits back to the country of origin.⁴⁰³ This would also shift the responsibility of the due diligence on data governance from the submitter/researcher to the database service provider.⁴⁰⁴ The Convention on Biological Diversity would adopt a decision for national regulations on databases to conform to the multilateral mechanism obligations.⁴⁰⁵ Countries could then choose, by accepting negotiated terms of reference, to share their digital resources through a central node maintained by the Secretariat of the Convention, or choose to upload data directly in this network;⁴⁰⁶

(b) On the other hand, a regional group warned against interfering with current databases governance and practices.⁴⁰⁷

E. Relation to other approaches and systems

119. This section addresses issues (d), (g), (k), (l) and (j) from the annex to decision 15/9.

1. Potential to voluntarily extend the multilateral mechanism to genetic resources or biological diversity (issue (d))

120. A number of submissions expressed interest in the idea of possibly extending the multilateral mechanism to genetic resources or biological diversity.⁴⁰⁸ It was noted:

(a) That a single mechanism covering DSI, as well as genetic resources could potentially be in line with paragraph 9 of decision 15/9;⁴⁰⁹

(b) It could standardize ABS requirements, answering both private and public research sector;⁴¹⁰

³⁹⁹ Algeria.

⁴⁰⁰ CGIAR.

⁴⁰¹ Algeria.

⁴⁰² TWN.

⁴⁰³ Belarus.

⁴⁰⁴ TWN.

⁴⁰⁵ Algeria.

⁴⁰⁶ IIFB.

⁴⁰⁷ European Union and its member States.

⁴⁰⁸ European Union and its member States, Switzerland, DFG, Endevo Biosciences, Gingko Bioworks, ICC, Vogel.

⁴⁰⁹ Switzerland.

⁴¹⁰ European Union and its member States, CGIAR, DFG, Endevo Biosciences, JBA.

(c) Increased legal clarity could make it more attractive for countries to opt into the enlarged mechanism;⁴¹¹

(d) Reduced complexities could future-proof the mechanism.⁴¹²

121. Some submissions expressed the view that each Party must remain sovereign over its genetic resources⁴¹³ and that the multilateral mechanism should not undermine national systems for regulating ABS from the use of genetic resources and other biological resources.⁴¹⁴ A Party⁴¹⁵ agreed that the multilateral mechanism could be extended as long as its national conditions were respected, and one organization⁴¹⁶ proposed to consider the opposite by adding DSI to the bilateral agreements in place for genetic resources. Another Party⁴¹⁷ stated that any extension of the multilateral mechanism to genetic resources should be considered on a voluntary basis with the aim of gradually making such an extension more attractive and less costly to all. An organization expressed concern regarding the impact of a wider instrument on research and data management systems.⁴¹⁸

122. Some submissions mentioned other challenges:

(a) A physical transfer does not always accompany the sharing of data so that a unified system would need to allow for genetic resources and DSI to be treated separately;⁴¹⁹

(b) The extension of the multilateral mechanism to “biological diversity” would go beyond the scope of the third objective of the Convention and would also be problematic to implement;⁴²⁰

(c) An expansion of the mechanism would require more discussions, which would delay the implementation of the multilateral mechanism on DSI.⁴²¹

123. Some submissions raised the issue of how extending the multilateral mechanism to genetic resources or biological diversity would related to other ABS instruments,⁴²² with some expressing concern that extending the multilateral mechanism to genetic resources or biological diversity should not contradict or weaken other existing instruments, including the Nagoya Protocol and ITPGRFA.⁴²³ This was related to the concern that expansion could increase the risk of double payments, through bilateral agreements and through the global fund.⁴²⁴ On the other hand, an organization suggested that if the Convention on Biological Diversity were to develop an inclusive mechanism for benefit-sharing from the use of DSI then ITPGRFA could consider revisions to its multilateral system to follow the same approach.⁴²⁵

124. Some submissions also expressed concern about extending the mechanism to include access to pathogen samples as it could delay their timely sharing for effective public health response and risked duplicating processes under way in WHO.⁴²⁶

125. Some submissions proposed approaches to an expansion of the multilateral mechanism:

⁴¹¹ ICC, DFG.

⁴¹² African Group, Algeria.

⁴¹³ Burundi.

⁴¹⁴ Brazil.

⁴¹⁵ Colombia.

⁴¹⁶ AIR Trust.

⁴¹⁷ Canada.

⁴¹⁸ CETAF.

⁴¹⁹ WSI.

⁴²⁰ Canada.

⁴²¹ China.

⁴²² European Union and its member States, Switzerland.

⁴²³ Australia, IIFB.

⁴²⁴ European Union and its member States, Japan.

⁴²⁵ CGIAR.

⁴²⁶ Australia, IFPMA.

(a) A tiered approach where the Parties opting in to include genetic resources into the mechanism would receive a higher share of the benefits, as would be agreed by the Conference of the Parties;⁴²⁷

(b) The multilateral mechanism would first include genetic resources in cases of transboundary distribution and in cases where obtaining prior informed consent is not possible;⁴²⁸

(c) The mechanism would focus on DSI at present, but without limiting its future scope, and decide at a later stage how to include genetic resources of biological diversity.⁴²⁹

126. An organization⁴³⁰ indicated that the multilateral mechanism should be legally binding, either through an amendment to the Convention on Biological Diversity or the negotiation of a new legal instrument.

127. Some Parties also emphasized the need to take into account linkages with the current discussions on resource mobilization under the Convention.⁴³¹

2. Other policy options for the sharing of benefits from the use of digital sequence information on genetic resources, including as identified through further analysis, as referred to in paragraphs 6 and 7 of decision 15/9 (issue (g))

(a) Hybrid approaches

128. Several proposals were made for possible exemptions from a multilateral approach where benefit-sharing from the use of DSI could be done bilaterally:

(a) Use of DSI from a known country of origin;⁴³²

(b) Endemic species;⁴³³

(c) Products derived from well-defined traditional knowledge;⁴³⁴

(d) DSI coming from a genetic resource from land, water, territories, or areas of indigenous peoples and local communities which would come under the Nagoya Protocol, whether or not it is known before or after the fact.⁴³⁵

129. Several submissions⁴³⁶ expressed the concern that hybrid approaches or multiple exceptions to the multilateral mechanism could lead to administrative complexity and would disincentivize research and discourage researchers from working with data from countries with separate terms and conditions. Several others⁴³⁷ argued that a hybrid solution that would require tracking and tracing would not be practical. An organization explained that there is usually not a direct value link between one specific sequence and a product, so any policy option based on the use of a specific piece of DSI in the innovation process to determine benefit-sharing would not make sense.⁴³⁸

130. An organization⁴³⁹ listed potential problematic scenarios as follows:

(a) DSI used in early stages of a product development might not be present in final product;

⁴²⁷ CGIAR, ICC.

⁴²⁸ CABI, TWN.

⁴²⁹ Uganda, United Kingdom, United States, IIFB, JPMA, WSI.

⁴³⁰ SCJ.

⁴³¹ European Union and its member states, Jordan, Switzerland.

⁴³² Brazil, Türkiye, TWN.

⁴³³ Türkiye.

⁴³⁴ Brazil.

⁴³⁵ IIFB.

⁴³⁶ United States, DFG, ICC.

⁴³⁷ Switzerland, Alliance Germany, CETAF, CGIAR, DSI-SN, ICC, SPNCH, VIB .

⁴³⁸ ICC.

⁴³⁹ CGIAR.

(b) Technology enables in vitro and in silico replication of DNA followed by horizontal gene transfer to reintroduce them into a material product;

(c) In many instances, a specific gene sequence can be found in numerous countries, so users can avoid bilateral benefit-sharing obligations by accessing the same sequence from other materials available from multilateral or unregulated sources.

(b) Multilateral approaches

131. Several submissions⁴⁴⁰ state that the multilateral mechanism does not mean the loss of sovereignty of Parties over their biodiversity, and that bounded openness or common heritage notions are the most appropriate for a multilateral mechanism. Others⁴⁴¹ were concerned about research and innovation being slowed down by a bilateral component or barrier to access to DSI, particularly for health emergencies, such as a pandemic. Another organization⁴⁴² proposed to overcome those concerns by focusing on a levy that is not grounded in the utilization of any particular genetic resource or traditional knowledge, such as a micro-levy for a cloud computing resource.

(c) Decision-making process

132. Two submissions⁴⁴³ reflected that none of the options presented at the fifteenth meeting of the Conference of the Parties met the criteria from paragraphs 9 and 10, so that other options might need to be proposed. However, several submissions⁴⁴⁴ highlighted that the development of additional options would take time and capacity away from exploring fewer existing options in depth, including through the consideration of the matrix built by the informal Advisory Group on DSI, and the compilation of lessons learned and studies requested by the Conference of the Parties in decision 15/9, paragraph 22.

3. Interface between national systems and the multilateral mechanism on benefit-sharing (issue (k))

133. The main points from the submissions revolved around:

(a) Keeping the criteria set in decision 15/9 on DSI;⁴⁴⁵

(b) The need to consider existing national frameworks, laws, and policies on ABS⁴⁴⁶, including for the trigger points;⁴⁴⁷

(c) The possibility to update national laws on ABS to include DSI under the guidance of the Conference of the Parties,⁴⁴⁸ possibly through regional initiatives such as the *Commission des Forêts d'Afrique Centrale*.⁴⁴⁹

(d) The need to give indigenous peoples and local communities' rights special consideration at the national level:

(i) A Party mentioned the tension between those who seek to exploit and utilize genetic resources, and the chieftain authority which has the right to protect the Māori traditional knowledge through prior informed consent and mutually agreed terms and forbid genetic modification or even sequencing of a taonga (sacred) species;⁴⁵⁰

⁴⁴⁰ Algeria, Ruiz, Vogel.

⁴⁴¹ BIA, IFPMA.

⁴⁴² SCJ.

⁴⁴³ Canada, SCJ.

⁴⁴⁴ China, European Union and its member States, Alliance Germany.

⁴⁴⁵ European Union and its member States, AIR Trust, IIFB.

⁴⁴⁶ China, United States, IDLO, UNEP.

⁴⁴⁷ Brazil.

⁴⁴⁸ Algeria, African Group, Burundi, Uganda.

⁴⁴⁹ Burundi.

⁴⁵⁰ New Zealand.

(ii) Prior informed consent and mutually agreed terms apply to all genetic resources on the lands, waters, territories and areas of indigenous peoples and local communities, whether or not this fact was known before the genetic resource was collected, the DSI extracted, or the sequence downloaded;⁴⁵¹

(iii) However, another Party⁴⁵² stated that the multilateral mechanism is not the appropriate place for protection measure for traditional knowledge, and another submission⁴⁵³ that companies and consumers should be given priority over other stakeholders as they will be bearing the financial burden of the multilateral mechanism;

(e) The need to include national departments of treasury and public research institutions in discussions.⁴⁵⁴

134. On the other hand, two submissions called for the multilateral mechanism to be flexible enough to accommodate unique circumstances as long as hybrid systems are kept as simple as possible,⁴⁵⁵ to not undermine indigenous peoples and local communities' rights to protect their traditional knowledge,⁴⁵⁶ and to ensure the continuity of the benefit-sharing system in case of armed conflict or destabilization of a government.⁴⁵⁷

4. Relationship with the Nagoya Protocol (issue I)

135. Concerning the prior informed consent and mutually agreed terms, several submissions suggested that DSI could be subject to mutually agreed terms at the point of access to the genetic resource, and later would fall under the multilateral mechanism after deposition in a public database.⁴⁵⁸ One organization cautioned against allowing bilateral negotiations on access to and benefit-sharing from the use of individual pieces of DSI as this would be contrary to open access to data in the multilateral mechanism.⁴⁵⁹

136. One organization expressed the view that researchers should be able to voluntarily include DSI under the provisions of the Nagoya Protocol and use its bilateral mechanism.⁴⁶⁰

137. Some organizations suggested that the Nagoya Protocol could help inform the development of the multilateral mechanism with one calling for the mechanism to adhere to the principles of the Nagoya Protocol⁴⁶¹ and another suggesting elements of the Protocol that should be taken into account in the development of the multilateral mechanism such as community protocols, capacity-building, and prior informed consent based on mutually agreed terms.⁴⁶² Several submissions stated that the DSI mechanism should not undermine the rights and responsibilities under the Convention and the Nagoya Protocol.⁴⁶³

138. Others addressed linkages with specific provisions of the Protocol:

(a) Several submissions⁴⁶⁴ called for a discussion around Article 8 of the Nagoya Protocol and the special consideration of pathogens to be excluded from the multilateral mechanism, also in the light of the "pandemic treaty" under negotiation at WHO;

⁴⁵¹ IIFB.

⁴⁵² Canada.

⁴⁵³ JPMA.

⁴⁵⁴ Ruiz, Vogel.

⁴⁵⁵ New Zealand, CABI.

⁴⁵⁶ Australia.

⁴⁵⁷ Benin.

⁴⁵⁸ European Union and its member States, United Kingdom, CABI.

⁴⁵⁹ DFG.

⁴⁶⁰ AIR Trust.

⁴⁶¹ CABI.

⁴⁶² IIFB.

⁴⁶³ Australia, Japan, AIR Trust.

⁴⁶⁴ Brazil, ICC, JPMA, LERU.

(b) Some submissions⁴⁶⁵ considered that the multilateral mechanism should be linked to Article 10 of the Nagoya Protocol. However, others⁴⁶⁶ were concerned that if the multilateral mechanism fell under Article 10 of the Nagoya Protocol, it would exclude non-Parties to the Protocol from receiving benefits and hinder alignment with other ABS instruments.

139. Several submissions⁴⁶⁷ emphasized that it was important for the multilateral mechanism to be discussed under the Convention on Biological Diversity for all Parties to be involved and able to benefit from it.

140. One major concern was the risk of double payments in the presence of both national laws and the multilateral mechanism on DSI. Some submissions proposed that multilateral mechanism could replace national laws, with countries relinquishing legal obligations and requirement applicable to materials, information and uses covered by the multilateral mechanism,⁴⁶⁸ at least when Parties do not have national ABS measures for DSI in place, or decide to opt-in to the multilateral mechanism.⁴⁶⁹ The resulting complexity, uncertainty and burdensome bureaucracy⁴⁷⁰ should not be the responsibility of the multilateral mechanism, in line with principles in decision 15/9, paragraph 9,⁴⁷¹ nor that of databases.⁴⁷² For those Parties who refuse to relinquish conflicting legal requirement on ABS for DSI, they would have to opt out of the multilateral mechanism and not participate nor benefit from it, which might lead to a reduction in international scientific research cooperation.⁴⁷³

141. A Party⁴⁷⁴ stated that the multilateral mechanism could be an efficient way to trace the source of genetic resources, in turn helping the implementation of the Nagoya Protocol.

5. Adaptability of the mechanism to other resource mobilization instruments or funds (issue (j))

142. See also related discussion in section A on “Governance of the funds”.

143. Several submissions stated the importance of aligning mechanisms to avoid fracturing the financial landscape, reducing efficiencies, and duplicating requirements,⁴⁷⁵ increasing the complexity of dealing with the various applicable intellectual property rights, data privacy regulations and ethical guidelines of the various instruments,⁴⁷⁶ and conflicting triggering points.⁴⁷⁷

144. One Party proposed to use one fund, such as under GEF, to streamline financial mechanisms on benefit-sharing under the BBNJ Agreement and the Convention on Biological Diversity, as well as implementation of the Kunming-Montreal Global Biodiversity Framework.⁴⁷⁸ Another Party suggested that GEF could host the fund of DSI as databases serve a range of goals, such as conservation and sustainable use of biodiversity, but also marine biodiversity beyond national jurisdiction, public health, or food security.⁴⁷⁹ A third Party called for an open and flexible multilateral mechanism on DSI to be able to address other relevant instruments as appropriate, suggesting it be discharged by the Global Biodiversity Framework Fund.⁴⁸⁰ Lastly, two organizations

⁴⁶⁵ African Group, Ruiz, Vogel.

⁴⁶⁶ CETAF, SPNCH.

⁴⁶⁷ African Group, Algeria, Canada, China, Pakistan, NHM-UK.

⁴⁶⁸ ICC.

⁴⁶⁹ Switzerland, DFG, TWN.

⁴⁷⁰ United Kingdom, CABI, ICC, WSI.

⁴⁷¹ European Union and its member States.

⁴⁷² Canada.

⁴⁷³ CABI, DFG.

⁴⁷⁴ Burundi.

⁴⁷⁵ African Group, Australia, European Union and its member States, Japan, ICC.

⁴⁷⁶ Pakistan.

⁴⁷⁷ Brazil.

⁴⁷⁸ Australia.

⁴⁷⁹ Canada.

⁴⁸⁰ United Kingdom.

called for a universally applicable solution on DSI, able to function under the BBNJ Agreement, WHO, and ITPGRFA.⁴⁸¹

Specific points of alignment

145. *Alignment with WHO.* A Party⁴⁸² called for alignment with the “pandemic treaty” under negotiation at WHO, which includes proposals to establish a pathogen ABS system. Another Party⁴⁸³ raised the question of whether the mechanism of the Convention on Biological Diversity could or should play a role in the pandemic treaty under negotiation at WHO, and an organization⁴⁸⁴ emphasized that general compatibility with requirements for human health were needed in the multilateral mechanism.

146. *Alignment with the recent BBNJ Agreement.* Parties⁴⁸⁵ called for close coordination and possible alignment as modalities for benefit-sharing under the new BBNJ Agreement will be decided after the Convention on Biological Diversity has had discussions on its own modalities on DSI.

147. *Alignment with ITPGRFA.* A number of submissions⁴⁸⁶ called for mutually supportive funds and clear division of labour between the Convention on Biological Diversity and ITPGRFA for an overall positive impact.

148. *Alignment with WIPO.* A submission⁴⁸⁷ mentioned that the World Intellectual Property Organization (WIPO) is considering a treaty on disclosure requirements for patent applications based on genetic resources or traditional knowledge associated with genetic resources. They expressed the view that WIPO is the appropriate forum for consideration of these matters. Another submission⁴⁸⁸ pointed to documentation of traditional knowledge in a database as a potentially important tool that has been raised in discussions at WIPO.

149. One organization⁴⁸⁹ envisioned a system that would complement the climate change mitigation fund allocation based on carbon emissions under the United Nations Framework Convention on Climate Change.

⁴⁸¹ CETAF, SPNCH.

⁴⁸² Australia.

⁴⁸³ Norway.

⁴⁸⁴ CABI.

⁴⁸⁵ China, Norway.

⁴⁸⁶ Norway, CABI, CGIAR.

⁴⁸⁷ Canada.

⁴⁸⁸ Pantheon-Assas.

⁴⁸⁹ Pantheon-Assas.

Annex I

Abbreviations

ABS	Access and benefit-sharing
AIR Trust	Aotearoa Indigenous Rights Trust
Alliance Germany	Alliance of university and non-university biodiversity research in Germany
BIA	United Kingdom BioIndustry Association
BOI	Philippine Board of Investments
CABI	Center for Agriculture and Bioscience International
CARE	Collective benefits, authority to control, responsibility, ethics
CETAF	Consortium of European Taxonomic Facilities
CGIAR	Consultative Group for International Agricultural Research
DOALOS	Division of Ocean Affairs and the Law of the Sea
DFG	Deutsche Forschungsgemeinschaft (German Research Foundation)
DSI	Digital sequence information
DSI-SN	DSI Scientific Network
FAIR	Findability, accessibility, interoperability, reusability
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environment Facility
Halewood and others	Co-authors of journal submission “Benefit-sharing and the new multilateral mechanism for Digital Sequence Information”
ICC	International Chamber of Commerce
IDLO	International Development Law Organization
iDSI	Interdisciplinary researchers working on DSI
IIFB	International Indigenous Forum on Biodiversity
IFPMA	International Federation of Pharmaceutical Manufacturers and Associations
INSDC	International Nucleotide Sequence Database Collaboration
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
JBA	Japan Bioindustry Association
JBF	Keidanren – Japan Business Federation
JPMA	Japan Pharmaceutical Manufacturers Association
LERU	League of European Research Universities
NHM-UK	Natural History Museum of London
OECD	Organization for Economic Co-operation and Development
ORDG	Open and Responsible Data Governance
SPNCH	Society for the Preservation of Natural History Collections
TWN	Third World Network
UNEP	United Nations Environment Programme
VIB	Vlaams Instituut Biotechnologie – Flemish Institute of Biotechnology
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WSI	Wellcome Sanger Institute

Annex II

List of submissions

A. Parties to the Convention

Algeria
 Australia
 Belarus
 Benin
 Brazil
 Burundi
 Canada
 China
 Colombia
 European Union and its member States
 Japan
 Jordan
 Malawi, on behalf of the African Group
 New Zealand
 Norway
 Pakistan
 Switzerland
 Türkiye
 Uganda
 United Kingdom of Great Britain and Northern Ireland

B. Non-Parties to the Convention

United States of America

C. Organizations and observers

Alliance of University and Non-University Biodiversity Research in Germany
 Aotearoa Indigenous Rights Trust (AIR Trust)
 Basecamp Research Ltd
 Centre for Agriculture and Bioscience International (CABI)
 Co-authors of journal submission “Benefit- sharing and the new multilateral mechanism for Digital Sequence Information” (Halewood and others)
 Consortium of European Taxonomic Facilities (CETAF)
 Consultative Group for International Agricultural Research (CGIAR)
 German Research Foundation (DFG)
 Division for Ocean Affairs and the Law of the Sea (DOALOS) of the Office of Legal Affairs of the United Nations
 DSI Scientific Network (DSI-SN)
 Enveda Biosciences
 Flemish Institute of Biotechnology (VIB)
 Flemish inter University Council
 Food and Agriculture Organization of the United Nations (FAO)
 Ginko Bioworks
 Interdisciplinary researchers working on DSI (iDSI)
 International Chamber of Commerce (ICC)
 International Development Law Organization (IDLO)
 International Federation of Pharmaceutical Manufacturers and Associations (IFPMA)

International Indigenous Forum on Biodiversity (IIFB)
International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
Japan Bioindustry Association (JBA)
Japan Pharmaceutical Manufacturers Association (JPMA)
Keidanren (Japan Business Federation (JBF))
League of European Research Universities (LERU)
Manuel Ruiz Muller (Consultant)
Natural History Museum of London (NHM-UK)
Panthéon-Assas Université (Prof. Sacha Bourgeois-Gironde and Bruna Gomes Maia, Ph.D. student)
Philippine Board of Investments (BOI)
Prof. Joseph Vogel
Science Council of Japan
Society for the Preservation of Natural History Collections (SPNHC)
Third World Network (TWN)
Tsukuba Association Supporting Overseas Plant Genetic Resource Activities (TASO-PGR)
United Kingdom BioIndustry Association (BIA)
United Nations Environment Programme (UNEP)
Weizenbaum Institute
Wellcome Sanger Institute (WSI)
