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OPEN-ENDED WORKING GROUP
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Agenda item 5

DIGITAL SEQUENCE INFORMATION ON GENETIC RESOURCES

Addendum

Note by the Executive Secretary

I. BACKGROUND

1. The Conference of the Parties to the Convention on Biological Diversity at its fourteenth meeting considered any potential implications of the use of digital sequence information on genetic resources (DSI) for the three objectives of the Convention and adopted decision 14/20. Through this decision, the Conference of the Parties committed to working towards resolving the divergence of views among Parties regarding benefit-sharing from the use of DSI through a process, comprising the submission of views and information by Parties, the commissioning of a number of studies, and the convening of an ad hoc technical expert group (AHTEG). The Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its third meeting also considered any potential implications for the objective of the Nagoya Protocol and adopted decision NP-3/12 on digital sequence information on genetic resources. According to decisions 14/20 and NP-3/12, the Open-ended Working Group on the Post-2020 Global Biodiversity Framework was to consider the outcomes of the AHTEG and to make recommendations to the Conference of the Parties at its fifteenth meeting on how to address DSI in the context of the post-2020 global biodiversity framework, and also to submit its outcomes to the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its fourth meeting.

2. Accordingly, the Working Group, at the first part of its third meeting in July and August 2021, addressed this issue on the basis of a note by the Executive Secretary (CBD/WG2020/3/4), under agenda item 5. The present document complements that document and provided further background information.[1]

3. During the first part of the meeting of the Working Group, the Contact Group on DSI was established under the co-leadership of Ms. Lactitia Tshitwamulomoni (South Africa) and Mr. Gaute Voigt-Hanssen (Norway). The Contact Group submitted the following outputs to the plenary:[2]

(a) The potential elements of a draft recommendation on DSI, in brackets, containing all textual proposals as received;

(b) The co-leads' summary of the discussion of the contact group regarding areas of potential convergence and of apparent divergence;

(c) The co-leads' summary of the discussion of the contact group regarding the linkages between DSI and the post-2020 global biodiversity framework.

[1] Section I, paras. 1-7.

[2] See CBD/WG2020/3/5, annex V.

4. Additionally, in the final plenary, the Co-Chairs and the Executive Secretary established an informal Co-Chairs' advisory group on digital sequence information on genetic resources to be led by the co-leads of the contact group, who were to assist in conducting consultations during the period prior to the resumed meeting.[3,4]

5. The proceedings of the discussions on DSI under agenda item 5 can be found in the report on the first part of the meeting (CBD/WG2020/3/5, paras. 46-60) and the above-mentioned outcomes of the contact group are contained in annex V to the report.

6. The present document has been issued to facilitate deliberations on DSI at the resumed third meeting of the Working Group and to provide a bridge to explain and summarize the work done between the first and the second parts of the third meeting of the Working Group. It builds upon work carried out by the Working Group at the first part of its meeting and draws upon the work of the informal advisory group. As noted above, it complements the chapeau document, which contains, as annexes, the outcomes of the AHTEG, a list of potential policy options, a preliminary framework for potential criteria, and the summary points from the online forum on DSI.[5] Section II below provides an overview of the work of the Informal Co-Chairs' Advisory Group on digital sequence information on genetic resources, and section IV proposes elements of a draft recommendation.

7. Both document CBD/WG2020/3/4 and the present addendum, are complemented by several information documents:

(a) The report of the AHTEG on Digital Sequence Information on Genetic Resources;[6]

(b) The report of the co-leads on the work of the informal advisory group, available as an information document[7], which includes a summary of organizational matters, a report on the work of the advisory group with regard to the framework for the assessment of policy options, the co-leads' summary of the discussion on potential convergence and apparent divergence, and the conclusions and recommendations of the co-leads;

(c) The compilation of submissions on views and new information on policy approaches, options or modalities for DSI, also available as an information document;[8]

(d) The information document presenting an update of DSI in relevant international processes and policy debates;[9]

(e) The information document presenting examples of actual and potential applications of DSI relevant to the conservation and sustainable use of genetic resources for food and agriculture provided by the Commission on Genetic Resources for Food and Agriculture.[10]

II. WORK OF THE INFORMAL CO-CHAIRS ADVISORY GROUP

8. As stated in its terms of reference,[11] the advisory group was established to provide advice and feedback to the Co-Chairs and the Executive Secretary on the following elements, in advance of the second part of the third meeting of the Working Group:

[3] See CBD/WG2020/3/5, paras. 57-58, for details on the establishment of the advisory group.

[4] The terms of reference of the group are appended to annex V of CBD/WG2020/3/5.

[5] CBD/WG2020/3/4, annexes I-III.

[6] CBD/DSI/AHTEG/2020/1/7.

[7] CBD/WG2020/3/INF/8.

[8] CBD/WG2020/3/INF/7.

[9] CBD/WG2020/3/INF/1.

[10] CBD/WG2020/3/INF/9.

[11] See CBD/WG2020/3/5, annex V, appendix.

(a) The undertaking of an assessment of consequences of possible policy approaches, options or modalities for benefit-sharing arising from the utilization of DSI, based on the report on the first part of the third meeting of the Working Group, including CBD/WG2020/3/CRP.1, annexes II and III of document CBD/WG2020/3/4, and submissions received by 30 September 2021;

(b) Areas of potential convergence and areas of divergence based on the summary prepared by the co-leads, annexed to the report on the first part of the third meeting of the Working Group;

(c) Areas of additional work on DSI that may be required in the period between the third meeting of the Working Group and the fifteenth meeting of the Conference of Parties.

9. The advisory group on DSI met a total of five times from September to November 2021. The group held positive and constructive discussions on the matters identified above. Each of these elements are addressed below.

A. Framework for the assessment of policy options related to access and benefit-sharing for digital sequence information on genetic resources

10. The advisory group had been tasked with undertaking an assessment of the consequences of possible policy approaches, options or modalities for benefit-sharing arising from the utilization of DSI. In that connection, the group considered a draft analytical framework prepared by the co-leads with the support of the Secretariat.

11. Given that DSI is a highly complex issue, with both quantifiable and non-quantifiable costs and benefits, the co-leads had proposed that multi-criteria analysis techniques be used to guide the development of an analytical framework for an initial assessment of different DSI options. Multi-criteria analysis [12] is an assessment method that ranks or scores options against multiple criteria.

12. A key feature of multi-criteria analyses is the performance matrix, also known as a consequence table, in which alternative options are presented in columns, while rows describe the performance of each of those alternative options against a set of predetermined criteria.

13. For policy options, the advisory group worked on the basis of the policy options presented during the third webinar of the series on DSI, led by the Co-Chairs of the Working Group on the Post-2020 Global Biodiversity Framework (see CBD/WG2020/3/4, annex II, section A) and additional options submitted by Parties, indigenous peoples and local communities, observers and stakeholders and received by the Secretariat during and after the third meeting of the Open-ended Working Group. Accordingly, the advisory group retained options 0 to 5 from CBD/WG2020/3/4, annex II, section A, as well as a sixth policy option submitted during the first part of the Working Group. The updated list of policy options is contained in annex I below. Additional options were received through the call for submissions from notification 2021-063[13] and represent hybrid options, but they have not been included in the performance matrix at this time as only distinct separate options can be included in this initial stage of the multi-criteria analysis. However, it is proposed that these hybrid options be assessed at a later stage of the step-by-step approach.

14. The advisory group developed criteria and subcriteria, building upon the materials from the fourth webinar in the series on DSI (see CBD/WG2020/3/4, annex II, section B), as well as submissions and discussions of the advisory group. The revised list of the criteria can be found in annex II to the present document.

15. The final proposed performance matrix is contained in annex III.

16. Further information on the multi-criteria analysis methodology, including limitations on the method, policy options, criteria and scoring, can be found in CBD/WG2020/3/INF/8, section II, subsection A.

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[12] United Kingdom of Great Britain and Northern Ireland, Department for Communities and Local Government: http://eprints.lse.ac.uk/12761/1/Multi-criteria_Analysis.pdf.

[13] CBD/WG2020/3/INF/8.

B. Areas of potential convergence and apparent divergence on digital sequence information on genetic resources, and potential further work

17. The informal advisory group considered areas of potential convergence and apparent divergence on DSI, building upon the outcomes of the contact group at the first part of the third meeting of the Working Group (CBD/WG2020/3/5, annex V, section B). A full summary of the discussion prepared by the co-leads of the contact group is available in CBD/WG2020/3/INF/8, section II, subsection B.

18. Building on the discussions in the group, the co-leads have identified the following key points of consideration, of elements, that they believe could lead to 'higher-level criteria' or 'principles' for a solution on DSI (see CBD/WG2020/3/INF/8, section II, subsection C):

(a) Any benefits from the use of DSI should be shared in a fair and equitable way and solutions should be found to determine how to share benefits arising from the use of DSI;

(b) Access to DSI in public databases remains open;

(c) Indigenous peoples and local communities are stewards of biodiversity and their role and rights should be taken into account in addressing DSI;

(d) Capacity-building is an integral part of the solution on DSI.

19. In addition, in the light of the areas of potential divergence, several elements where further work may be useful have emerged. While it is difficult currently for all stakeholders to identify an agreed approach to benefit-sharing from the use of DSI, most of the advisory group considers that efforts to explore potential modalities will help to elucidate further common understanding on what fair and equitable benefit-sharing would entail in practical terms in this context. In this context the co-leads consider that further work or discussions in the following areas could be useful:

(a) Characterization of the monetary and non-monetary benefits that could be shared through a solution on DSI;

(b) Modalities to consider the role of indigenous peoples and local communities in a solution on DSI;

(c) The timetable for implementing a solution on DSI, and what it would imply;

(d) Consideration of special cases, such as health emergencies, and their implications for the solution.

20. In the light of the above, the co-leads have proposed that the multi-criteria analysis assessment should be advanced to the next steps, with the support of external expertise and elements such as weighing criteria, assessing available information, and consultations with a small group of Parties and stakeholders. The application of the criteria would help the group in focusing in on the options and developing the promising ones further for the assessment.

21. The co-leads have also recommended the continuation of the work of the Informal Co-Chairs' Advisory Group in the intersessional period after the resumed meeting of the Working Group and before the resumed fifteenth meeting of the Conference of the Parties, to complete its original mandate, including feedback on and review of the analysis of policy options referred to above. The group could also address any other issues that may be mandated by the Working Group at the resumed sessions of its third meeting.

III. ELEMENTS OF A RECOMMENDATION

22. As noted above, in decision 14/20, paragraph 12, the Conference of the Parties requested the Working Group to consider the outcomes of the meeting of the Ad Hoc Technical Expert Group on Digital Sequence Information on Genetic Resources and to make recommendations to the Conference of the Parties at its fifteenth meeting on how to address DSI in the context of the post-2020 global biodiversity framework. In decision NP-3/12, paragraph 3, the Working Group was requested to submit the outcome of its

deliberations for consideration by the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its fourth meeting.

23. At the first part of the meeting, the contact group prepared potential elements of a draft recommendation, captured in CBD/WG2020/3/5, annex V, section A. The text had not been negotiated or agreed. It represents, rather, a collection of views formulated by Parties, indigenous peoples and local communities and observers.

24. In view of the mandates outlined above, and taking into account the work of the Working Group at the first part of its third meeting as well as the Informal Co-Chairs' Advisory Group in the intersessional period, the Working Group may wish to prepare a recommendation along the following lines, while also drawing, as appropriate, upon the potential elements referred to above:

The Open-ended Working Group on the Post-2020 Global Biodiversity Framework,

Recalling decisions XIII/16 and 14/20,

1. *Welcomes* the outcomes of the meeting of the Ad Hoc Technical Expert Group on Digital Sequence Information on Genetic Resources;[14]

2. *Takes note* of the co-leads' report on the work of the Informal Co-Chairs' Advisory Group on digital sequence information on genetic resources, in particular:

(a) The work of the Advisory Group with regard to the framework for the assessment of policy options;[15]

(b) The co-leads' summary of the discussions on potential convergence and apparent divergence,[16] which advances the work outlined in CBD/WG2020/3/5, annex V, section B;

(c) The co-leads' conclusions and recommendations from the discussions of the Informal Co-Chairs' Advisory Group on digital sequence information on genetic resources to the Working Group,[17] which advances the work outlined in CBD/WG2020/3/5, annex V, section A.

3. *Also takes* note of the range of views presented during the informal online consultation.[18]

4. *Further takes note* of the following information developed through the informal activities on digital sequence information on genetic resources carried out at the request of the Co-Chairs of the Working Group:

(a) The listing of potential policy options contained in annex I to the note by the Executive Secretary;[19]

(b) The listing of potential criteria for assessing policy options contained in annex II to the note by the Executive Secretary;[20]

5. *Recognizes* the following key points of potential convergence that may lead to "higher-level criteria" or "principles" for a solution on digital sequence information on genetic resources:

(a) Any benefits from the use of digital sequence information on genetic resources should be shared in a fair and equitable way and solutions should be found on how to share benefits arising from the use of digital sequence information on genetic resources;

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[14] https://www.cbd.int/meetings/DSI-AHTEG-2020-01.

[15] Section II.A of the present document

[16] Ibir., section II.B.

[17] Section V of CBD/WG2020/3/INF/8

[18] https://www.cbd.int/dsi-gr/forum.shtml.

[19] CBD/WG2020/3/4/Rev.1.

[20] Ibid.

(b) Access to digital sequence information on genetic resources in public databases remains open;

(c) Indigenous peoples and local communities are stewards of biodiversity and their role and rights should be taken into account in addressing digital sequence information on genetic resources;

(d) Capacity-building is an integral part of the solution on digital sequence information on genetic resources.

6. *Endorses* the recommendation of the co-leads for a step-by-step approach, to help gradually narrow in on the elements needed to move the discussion forward and *requests* the Informal Co-Chairs' Advisory Group to continue its work, in particular to advance the following areas of work while ensuring ongoing consultation with Parties and stakeholders:

(a) The exploration of potential modalities that would help to further elucidate a common understanding on what fair and equitable benefit sharing would entail in practical terms in this context;

(b) The possible modalities that would help consider indigenous peoples and local communities in a solution on digital sequence information on genetic resources;

(c) The advancement of the multi-criteria analysis of policy options (annex I) according to criteria (annex II), and with a view to advance the assessment to the next steps, such as the weighing the criteria, and the assessment of available information;

(d) The potential timetable for the implementation of any solution on digital sequence information on genetic resources in the context of the post-2020 global biodiversity framework, and any implications of that timetable.

7. *Recommends* that the Conference of the Parties at its fifteenth meeting consider this recommendation and the outcomes of the work set out in paragraph 6 above with a view to identifying a solution to digital sequence information on genetic resources in line with the key points in paragraph 5 above and further to decision 14/20;

8. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol at its fourth meeting also consider this recommendation as well as any decision prepared by Conference of the Parties at its fifteenth meeting.

Annex I

POLICY OPTIONS TO BE CONSIDERED IN THE FIRST STEP OF THE MULTI-CRITERIA ANALYSIS

Option 0: Status Quo

1. Under this option it is recognized that some Parties have adopted domestic measures that regulate access to and use of digital sequence information on genetic resources (DSI), however, there is still a divergence of views among Parties regarding benefit-sharing from the use of DSI.

Option 1: Digital sequence information on genetic resources fully integrated into domestic access and benefit-sharing measures[5]

2. In this case, DSI is subject to each Party's ABS legislation. It is the traditional bilateral approach to access and benefit-sharing (ABS). Access is regulated similarly to how genetic resources are accessed under the Convention on Biological Diversity and the Nagoya Protocol, meaning that depending on the national legislation in place, access to DSI could be subject to prior informed consent (PIC) and mutually agreed terms (MAT) (i.e., essentially, GR = DSI). The utilization of DSI is to be regulated by MAT, as are benefit-sharing obligations, and MATs are negotiated for each DSI access. According to the study on ABS measures made available for the consideration of the AHTEG on DSI, some countries are already including DSI within the scope of their national ABS measures, and more are planning to do so in the near future.

3. Under this option, a tracking and tracing system would be required to not only determine the country of origin of each DSI record uploaded to the database but also how the DSI was being utilized and by whom so researchers could comply with that country's ABS obligations.

Option 2: Standard mutually agreed terms

4. This more general grouping of options enables benefit-sharing from the use of DSI, but it is decoupled from access to DSI (MAT but no PIC). Access is therefore not restricted, but benefit-sharing is determined by some type of standard MAT/license/standard multilateral transfer agreement/terms and conditions. The fact that the MAT is standardized implies that there is no need for individual negotiation of a contract for each DSI utilization, but one or a limited number of standard contracts. This alternative requires downstream monitoring of DSI use for implementation or enforcement, and monitoring. The difference between the two sub-options is the way that MATs are dealt with, one at the national level and the other at the international level.

Option 2.1: Standard mutually agreed terms/licence at the national level

5. In this scenario, each Party establishes a policy system with one or a limited number of standard MAT/licences in their domestic ABS legislation with which users need to comply. This system goes through each country's domestic legislation. Triggers can occur at commercialization, for example, and the benefits would be shared bilaterally. In a similar policy, benefit-sharing obligation is triggered when a patent is registered and starts after successful commercialization of a product developed using DSI. Researchers whose activity is subject to such national legislation must comply with the national system and trace the DSI back to the country of origin of the genetic resource. If a researcher uses multiple DSI from different countries, he/she is required to potentially comply with a number of MAT/licences, depending on which standard MAT/licence the country has decided upon for their DSI.

Option 2.2: Standard mutually agreed terms/licence at the international level

6. This option addresses benefit-sharing at the international level, as opposed to going through each country's national system as presented under option 2.1. One or more standard licences are agreed upon and adopted by Parties, in which the terms and conditions depend on the licence attached to the DSI. The benefits from the use of DSI are handled by an international system that redirects them to

the country of origin of the genetic resource. This means that the researcher/user does not have to approach each country individually.

7. This option offers the possibility to integrate the licences in the DSI database itself, and the terms and conditions are communicated to the user upon access (for example, obligations for commercial and non-commercial uses of a particular DSI). Another possibility is the integration of the terms and conditions or licences in the intellectual property system (for example, when seeking intellectual property protection, on the basis of a disclosure requirement on the use of DSI). In this option, benefits consist of pre-negotiated fixed royalties on the successful commercialization of a product.

8. A collaboration with journals, patent offices, databases, or any other point along the value chain of DSI should help enforce the reporting back to the DSI provider. In this case, the user is responsible for complying with the licence terms and conditions, and a downstream utilization tracking/monitoring mechanism will ensure the enforcement of these ABS measures.

Option 3: No prior informed consent, No mutually agreed terms

9. This general grouping of options involves a payment or contribution to go into a multilateral fund. It avoids the need for tracing the origin of the genetic resource from which the DSI was extracted, or the need to monitor the downstream utilization of the product or service derived from DSI. This option includes various possible forms of payments and contributions, with one sub-option being linked to the DSI itself, and the other being separate from the information itself.

Option 3.1: Payment for access to digital sequence information on genetic resources

10. Here, the principle of a payment for access to the sequences itself is central and can be set up in several ways:

11. One way is to collaborate with databases to help introduce a membership fee/subscription to access DSI. This fee can be determined following pre-negotiated criteria, such as, but not limited to research application, sector of research, revenue, or a flat rate annual fee.

12. Another way is to introduce a very small payment for access to individual DSI in the database. An account is created, and each sequence download results in a pre-determined fee being charged to the account.

13. Finally, a different arrangement is to provide free access to the sequence data itself, including some minimal data around it, such as species name, but introduce a fee to be paid on the associated data resulting from the analysis and processing of the data, such as protein function or gene association, as this associated data is estimated to be valuable for research and development. The BioSample database currently links sequence data with other data associated with the sequence itself, or the genetic resource from which it comes. In this policy sub-option, a collaboration with the BioSample database would lead to a charge for access.

Option 3.2: Other payments and contributions

14. Several ways in which payments and contributions can be established to be paid into a multilateral fund for benefit-sharing from the use of DSI have been proposed in the literature, all stemming from agreements with external entities. One proposal includes payment for a DSI-related service, such as storage, processing, expertise, and analysis of the sequences, offered in return for a payment.

15. Another proposal imposes a levy on products or services associated with DSI. One example is the imposition of a micro-levy on laboratory equipment linked with the production of DSI, while another is on the cloud-computing space rented for the purpose of sequence storage and/or processing.

16. Yet another proposal revolves around biodiversity bonds, as experiences from other fields, such as payments for the use of wildlife images, or climate change green bonds could be used to inform options for DSI. Another option involves a marketing programme whereby a label or badge is used on products to boost their sale and convey an idea around biodiversity conservation, while the

companies selling these products would redirect a negotiated percentage of benefits to a multilateral fund. Finally, voluntary contributions could fuel a multilateral fund and come from the private sector, database users, countries, private donors, subnational governments, or observers, etc.

Option 4: Enhanced technical and scientific capacity and cooperation[6]

17. Under this option, systematic and mandated technical and scientific cooperation and capacity development related to DSI are promoted. Enhanced capacity support for developing countries will democratize the access and use of DSI, making it more equitable so that each country has improved/expanded capacity and opportunity to generate, access and use DSI to its full potential. This could take the form of research collaborations, training, knowledge platforms, technology transfer, technology co-development, database satellites, database infrastructure, and more. This option is almost always presented in combination with other policy options.

Option 5: No benefit-sharing from digital sequence information on genetic resources

18. This option entails that the international community decides that no explicit benefit-sharing is necessary from the use of DSI from genetic resources and, thus, no additional mechanisms are proposed for benefit-sharing to be implemented.

Option 6: 1 per cent levy on retail sales of genetic resources

19. Under this option, a multilateral fund would be established and financed through a 1 per cent levy on all retail sales of goods in developed countries arising from the utilization of genetic resources in cases where the bilateral PIC and MAT system is not implementable or practicable. Funds would be distributed through a competitive project-based approach for conservation and sustainable use by indigenous peoples and local communities and others, guided by scientists and governed by the multilateral governing body.

Annex II

CRITERIA AND SUB-CRITERIA

(a) Effective in achieving policy goals

(1) Potential to deliver predictable monetary benefits

This policy option can deliver monetary benefits directly to the provider, or to a common fund. The predictability points to the ability of a country or indigenous peoples and local communities to anticipate the monetary benefit that they will receive at a point in time, according to the benefit-sharing modalities of the solution.

(2) Potential to deliver predictable non-monetary benefits

This policy option can deliver non-monetary benefits in a direct and systematic manner (imbedded in the option, not in an ad hoc manner).

(3) Access to public databases remains open

DSI in public databases remain openly accessible as is in the current system.

(4) Does not hinder research and innovation

The option would facilitate scientific research, innovation, and future technical and technological advances, both non-commercial and commercial.

(5) Potential to contribute to the conservation and sustainable use of biodiversity

This option would yield benefits that would help the conservation of biodiversity and its sustainable use, either directly (through targeted capacity-building or financing of conservation) or indirectly (through investment in fields proven to positively impact conservation and sustainable use of biodiversity), from both monetary and non-monetary benefits.

(b) Efficient and feasible to implement

(6) Technically feasible

This relates to the technical feasibility of the option and whether it can be done with existing infrastructure or whether it would require significant investments in new infrastructure and/or technology. Technical/infrastructure certainty also comes into consideration.

(7) Legally feasible

This criterion touches on the legal feasibility of the option in terms of the Convention on Biological Diversity and its protocols, its scope and its ability to suggest policy to its Parties.

(8) Legally clear and certain to implement

This criterion relates to the legal burden that would be required to implement the option. Would the legal aspect be understandable by all, easily implemented, and provide certainty? Or would it require the establishment of a complicated legal framework and significant investments to be implementable?

(9) Administratively simple

Administrative simplicity encompasses the procedures and processes needed for the implementation of the option. An administratively complex option would include high transaction costs and be a lengthy process.

(10) Implementable in an efficient and timely manner

Linkages between digital sequence information on genetic resources (DSI) and the post-2020 global biodiversity framework are being considered, so that the implementation of a DSI solution should

be coherent with the post-2020 timeline and could benefit from a clear, pragmatic, and practical process that would allow for a rapid implementation.

(11) Enables distinction between commercial and non-commercial use of DSI

The option allows that distinctions be made between commercial and non-commercial uses of the data to facilitate benefit-sharing on commercial applications of DSI.

(12) Cost of set-up and implementation

The monetary costs (public and private) of set up and implementation are clear (or can be estimated with ease). This information can be used at a later stage to perform a cost-effectiveness analysis.

(c) Enables good governance

(13) Easy to understand by providers and users

Each option involves a certain level of complexity that may make it easier or harder for all stakeholders concerned, both providers and users of DSI, to understand. Easy to understand options can help foster greater buy-in and a smoother implementation on the ground.

(14) Easily enforceable by providers

High enforceability means that, legally and technically, the option can be enforced by providers.

(15) Ease of compliance for users

Ease of compliance for the option means that it is easy for the user to comply with the policy in place.

(16) Does not result in jurisdiction shopping

Jurisdiction shopping happens when different countries have different laws and regulations some more stringent or complex than others making it cheaper or faster to do business in certain locations. Companies may end up preferring certain countries or locations because the regulations are easier to deal with.

(17) Facilitates the sharing of benefits with indigenous peoples and local communities

This option has the potential to include the establishment of a specific provision that channels benefits (monetary and/or non-monetary) to indigenous people and local communities.

(d) Coherent and adaptable

(18) Coherence with other forums considering DSI

This option has the potential to be coherent with and adaptable to other international forums currently considering DSI in their discussions and negotiations. This will help avoid the proliferation of DSI “systems”.

(19) Agile and adaptable to future technological and scientific development

To stay relevant over time, the option should be adaptable and flexible enough to remain relevant and effective in the face of future technological developments and information growth.

Annex III

PERFORMANCE MATRIX

Criteria and sub-criteria	Scoring 10=high-performing; 0=non-performing; 1=low-performing; N/A=do not know /not applicable. OR pass/fail	Option 0	Option 1	Option 2		Option 3		Option 4	Option 5	Option 6
		Status Quo	DSI treated as GR	Country MAT	Global MAT	Payment for access to DSI	Other contributions	Enhanced TSC and CB	No benefit sharing from DSI	1% levy on retail sales of GR
A. Effective in achieving policy goals										
1. Potential to deliver predictable monetary benefits										
2. Potential to deliver predictable non-monetary benefits										
3. Access to public databases remains open										
4. Does not hinder research and innovation										
5. Potential to contribute to the conservation and sustainable use of biodiversity										
B. Efficient and feasible to implement										
6. Technically feasible										
7. Legally feasible										
8. Legally clear and certain to implement										
9. Administratively simple										
10. Implementable in an efficient and timely manner										
11. Enables distinction between commercial and non-commercial use of digital sequence information on genetic resources										

Criteria and sub-criteria	Scoring 10=high-performing; 0=non-performing; 1=low-performing; N/A=do not know /not applicable. OR pass/fail	Option 0	Option 1	Option 2		Option 3		Option 4	Option 5	Option 6
		Status Quo	DSI treated as GR	Country MAT	Global MAT	Payment for access to DSI	Other contributions	Enhanced TSC and CB	No benefit sharing from DSI	1% levy on retail sales of GR
12. Cost of set-up and implementation										
C. Enables good governance										
13. Easy to understand by providers and users										
14. Easily enforceable by providers										
15. Ease of compliance for users										
16. Does result in jurisdiction shopping										
17. Facilitates the sharing of benefits with indigenous peoples and local communities										
D. Coherent and adaptable										
18. Coherence with other forums considering digital sequence information on genetic resources										
19. Agile and adaptable to future technological and scientific development										