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Ad Hoc Open-ended Working Group on Benefit-sharing from the Use of Digital Sequence Information on Genetic Resources
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Item 3 of the provisional agenda*
Further development of the multilateral mechanism for benefit-sharing from the use of digital sequence information on genetic resources, including a global fund

Executive summary of the studies commissioned pursuant to decision 15/9 on digital sequence information on genetic resources

Note by the Secretariat

I. Introduction

1. In decision 15/9 on digital sequence information on genetic resources (DSI), the Conference of the Parties to the Convention on Biological Diversity agreed that the benefits from the use of DSI should be shared fairly and equitably (para. 2) and also agreed on a set of criteria that a solution for fair and equitable benefit-sharing on DSI should follow (paras. 9 and 10). In the same decision, the Conference of the Parties established a multilateral mechanism on benefit-sharing from the use of DSI, including a global fund, and 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.

2. Also in decision 15/9 (para. 22 (b) and (c)), the Conference of the Parties requested the Executive Secretary to commission a study to analyse and model the extent to which a multilateral mechanism for benefit-sharing from the use of DSI, and any other options the Ad Hoc Open-ended Working Group might decide, met the criteria listed in paragraphs 9 and 10 of that decision; and a study on the options for revenue-generating measures at different points along the value chain, the feasibility of their implementation and their costs relative to their potential revenue.

3. In response to the requests, and with the generous support of the Government of Norway, the Government of the United Kingdom of Great Britain and Northern Ireland and the European Commission, the Secretariat partnered with the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), which collaborated with KPMG UK, in undertaking those studies.

4. Given the linkages between the issues described in paragraph 22 (b) and (c) of decision 15/9, the two studies were undertaken together. The present document contains the executive summary of the work accomplished. A presentation of the full studies can be found in document CBD/WGDSI/2/INF/1.

* CBD/WGDSI/2/1.

II. Methodology

5. Gathering the information required to carry out the studies entailed:

(a) Literature reviews to identify the market sectors and subsectors associated with the use of DSI, their respective value chains and current market sizes and expected market sizes up to 2030, as well as potential measures for generating funds and potential options for each modality of the multilateral mechanism;

(b) Semi-structured interviews with representatives from three Parties (including one regional economic integration organization), one regional organization, five industrial sectors, seven not-for-profit research institutions, one civil society organization and four institutions holding public databases,[1] with the aim being:

(i) To gather views on the extent to which potential options for each modality of the multilateral mechanism meet the criteria set out in paragraphs 9 and 10 of decision 15/9, including potential risks and opportunities;

(ii) To better understand views on the implementation of different measures for generating funds at various points along value chains and across different sectors;

(iii) To better understand challenges and potential solutions associated with various funds generating measures;

(c) A survey sent to the members of the Informal Advisory Group on Benefit-sharing from the Use of Digital Sequence Information on Genetic Resources requesting their views and perspectives on the extent to which various options met the required criteria.

6. In order to inform estimates of the possible scale of the revenue associated with the various options for the modality for contributions, a range of methods were considered for estimating the value associated with the use of DSI. They included market-based, non-market-based, income-based, cost-based and externalities-based approaches.[2] For each method, the absolute scale of the payment, the equity impact and the potential for cost pass-through in the form of higher prices for consumers were considered.[3]

7. A draft of the studies was made available for peer review on 17 May 2024. Parties, other Governments, indigenous peoples and local communities and observers were invited to submit comments on the draft, which were considered when the studies were being finalized. Responses were received from 23 Parties, one non-Party and 13 organizations.[4]

8. The following limitations of the studies affected the extent of research and consultations and should be taken into account in considering the findings of the studies:

(a) The shortness of the time frame from initiation of the studies to submission of the first draft potentially played a role in determining the extent of the stakeholder consultations and research that could be conducted;

(b) There was an absence of an internationally agreed definition of DSI.[5] While there is a consensus that DSI includes nucleic acid sequencing data, its scope could extend to other data types derived from or associated with dematerialized genetic resources, such as protein sequence data;

(c) Some stakeholders may not have had the resources or capability to respond to the survey, given the time constraint (10 days). In addition, interviews and surveys were conducted in English only, which may have limited some participation;

[1] Note that the interviews were conducted on the understanding that specific points would not be attributed to individual interviewees.
[2] See CBD/WGDSI/2/INF/1, sect. 13.
[3] See sect. III.D on of the feasibility of these different methods for each option related to contribution to the fund.
[4] See www.cbd.int/notifications/2024-048.
[5] The description of DSI utilized for these studies can be found in CBD/WGDSI/2/INF/1, sects. 2, 3 and 5.

(d) Many participants indicated some difficulty in completing the survey, due partly to uncertainty regarding the meaning of certain criteria. Individuals may have interpreted terms related to the criteria and modalities of the multilateral mechanism differently owing to the broadness of their description.

III. Summary of findings

A. Overview of market sectors which use digital sequence information on genetic resources

9. The use of DSI is associated with products and processes from a wide variety of industrial sectors. These include development of new medicines, ingredients, health and beauty supplements, cosmetic products, improved seeds, textiles and feed for animals, as well as co-adjuvants and enhancers used in many industrial and manufacturing processes, as well as equipment and programmes for the sequencing, characterization and processing of DSI.

10. Five key market sectors considered in the studies were: pharmaceutical; cosmetics; plant and animal breeding and agricultural biotechnology; laboratory equipment (hardware); and information technology programmes/platforms (software) and commercial producers of information on DSI. Table 1 below presents the estimated global annual revenue for each of these key sectors.

Table 1
Total annual revenue generated by sectors that use digital sequence information on genetic resources: estimates for 2024 and projections for 2030[a]

Sector	*Billions of dollars*	
	2024	*2030*
Pharmaceutical	593.24	836.60
Cosmetics	333.90	474.00
Plant and animal breeding and agricultural biotechnology	581.62	904.23
Laboratory equipment associated with the use of DSI	43.36	66.40
Information, scientific and technical services related to DSI	7.65	22.44
Total	**1 559.77**	**2 330.67**

[a] Revenue estimates for 2024 were calculated based on publicly available information assuming contributions are made by all actors in each of the sectors listed. Full sources, references and access dates for each sector can be found in document CBD/WGDSI/2/INF/1. All revenue figures were calculated for 2024 using the revenue for the most recent year and the compound annual growth rate of each sector . Revenue estimates for 2030, where not explicitly presented in the external sources, were extrapolated from the estimates of 2024 revenue provided above, using the compound annual growth rates.

B. Comparing and contrasting market sector value chains and links to potential payment triggers

11. While the specific details associated with the use of DSI and revenue generation vary, value chains in the five market sectors generally follow a sequential approach extending from research and discovery to product development and through to product commercialization. Various stakeholders intersect at each stage of those value chains to generate revenue in a variety of ways. Value chains for product/service development across the pharmaceutical, cosmetics and plant and animal breeding and agricultural biotechnology sectors exhibit broadly similar patterns with respect to access to and use of DSI, and include genetic sequencing and DSI analysis and characterization. DSI may be used directly in the development of products, as well as in a more indirect way, for example, to identify or confirm the presence of favourable genes in candidate organisms for breeding programmes. In some cases, the sectors may continue to rely on physical genetic resources in the production of some end products.

12. In the hardware and software sectors, DSI is used to develop new pieces of equipment and computational programmes. The development timelines for these products tend to be shorter and their use tends to be cross-sectoral. Hardware in the form of sequencing technology, for example, is required for the sequencing of genetic resources, while software is used to analyse genomic properties in the pharmaceutical, cosmetics and plant and animal breeding and agricultural biotechnology sectors.

13. The studies considered four points at which the requirement that benefits be shared could be triggered, namely:

(a) The point where DSI is accessed in or downloaded from public databases;

(b) The point where DSI is used in a project or process;

(c) The point where a product developed using DSI is commercialized;

(d) A point unrelated to the access to or use or commercialization of specific DSI.

14. For each of the five market sectors considered in the studies, a mapping exercise was undertaken to identify where the trigger points intersected with the value chains of those sectors.

Overview of market sectors that use digital sequence information on genetic resources and potential points in the value chain that may trigger the requirement to pay into the fund

Note: Potential triggers along the value chain are indicated in red. The triggers are: access to (1) DSI, use of DSI (2), commercialization of DSI (3) and a trigger unlinked to the use of specific DSI(4). Trigger point (1) varies from sector to sector, while trigger points (2), (3) and (4) occur at similar points along the value chains of all sectors. Further analyses of these trigger points can be found in tables 3 and 4 in section III.D below.

C. Potential revenue generation for the five sectors

15. The studies highlights a range of potential contributions to the global fund based on illustrative estimations of revenue and net profit across the five sectors considered.

16. Illustrated in table 2 below is the scale of contributions that could be generated for the global fund through a levy on total 2024 revenue for the sectors considered in the studies or a levy on profit (based on an assumed 12.5 per cent average net profit). The estimates presented are based on publicly available

sector-specific data and rely on number of assumptions and are, therefore, should be considered indicative only.[6]

Table 2
Illustrative annual contributions to the global fund based on sector revenue or an assumed net profit of 12.5 per cent[a] (2024)

	Contribution based on total revenue across relevant sectors of 1,559.77 (in billions of United States dollars) and assuming a levy on sector revenue		*Contribution based on total net profit across relevant sectors of 12.5 per cent (194.97 (in billions of United States dollars)) and assuming a levy on sector net profit*	
	Percentage levy	*Billions of United States dollars*	*Percentage levy*	*Billions of United States dollars*
(a)	0.10	1.56	1.00	1.95
(b)	1	15.60	10	19.50
(c)	0.64	10.00	5.13	10.00
(d)	1.28	20.00	10.26	20.00

[a] A 12.5 per cent average net profit across the sectors is assumed. Although research suggests that this varies between and within the sectors under consideration, it was not possible to identify net profit estimates for each sector.

17. Further analyses using a range of notional contributions to the global fund based on the indicative estimations of revenue and net profit across five market sectors can be found in the document containing the full studies The ranges have been highlighted through two methods: a bottom-up and a top-down approach. The bottom-up approach (reflected in rows (a) and (b) of table 2) indicates a range of possible contributions based on an assumed percentage levy on an assumed revenue or net profit derived from the use of DSI per sector. The top-down approach (reflected in rows (c) and (d) of table 2) assumes a notional target for the size of the global fund and details the prospective size of contributions to that fund by the five sectors based on an equal or proportional split of revenue or net profit. Both approaches are underpinned by publicly available data on the actual annual revenue generated by each sector to date.

D. Assessment of the extent to which various options for each modality of the multilateral mechanism meet the criteria set out in decision 15/9

18. Various solutions for the sharing of benefits from the use of DSI have been proposed over the past few years. However, the establishment of a multilateral mechanism on benefit-sharing from the use of DSI, including a global fund, means that several of those proposals no longer meet the criteria set out in decision 15/9 of the Conference of the Parties. Two additional proposals were presented at the first meeting of the Working Group. The modalities and the current proposed options for those modalities were used as a basis for the survey and interviews and can be found in the tables below.

19. Results from the literature review were coupled with interview notes and survey feedback to create matrices for assessing the extent to which options met the criteria,[7] which are presented in tables 3 to 8 below.

20. The pie charts are visualizations in summary form of the average scores given by survey respondents, indicating the extent to which options met the required criteria when linked to modalities (a) contribution to the fund, (b) disbursement of the funds, (c) non-monetary benefit-sharing and (d) governance and other policy options. The colour green signifies “very much meets the criteria”; orange

[6] See CBD/WGDSI/2/INF/1, sect. 13.
[7] See also CBD/WGSDSI/2/INF/1, sects. 13-17.

signifies “somewhat meets the criteria”; red signifies “does not meet the criteria”; grey signifies “do not know/not applicable”; and white signifies no response/no data.

21. An assessment of different methods for calculating the value of data, as a basis for calculating potential payments into the fund, was conducted for each of the proposed modalities for the contribution to the fund. Under that assessment, it is assumed that the calculation of the payment occurs at the same trigger point along the value chain (since the value of DSI might be different for different trigger points). Assumptions and limitations of that assessment should be considered.

22. Table 5 presents the options considered with respect to disbursement of the funds, together with the pros and cons related to the extent to which they meet the criteria under decision 15/9, as suggested by stakeholders and the literature.

23. In table 6, the options are considered with respect to non-monetary benefit-sharing, together with the pros and cons related to the extent to which they meet the criteria under decision 15/9, as suggested by stakeholders and the literature.

24. In table 7, the options are considered in the context of governance, together with the pros and cons related the extent to which they meet the criteria under decision 15/9, as suggested by stakeholders and the literature. In the third section, regarding “other members”, the survey responses regarding the consideration of different groups as observers or full members of the governing body are presented.

25. Table 8 presents the options considered in terms of other policy options, together with the pros and cons related to the extent to which they meet the criteria under decision 15/9, as suggested by stakeholders and the literature.

Table 3
Contributions to the fund: views on the extent to which proposed options meet the criteria in paragraphs 9 and 10 of decision 15/9

A. Trigger points	*Pros*	*Cons*	*Survey responses*
Access to DSI	Clear, predictable and straightforward for users. May not require a track and trace system for DSI .	May be inconsistent with open access to data. If coupled with the requirement to pay immediately into the fund, this may hinder research and innovation. Would require implementation of new measures by databases, which might be legally and financially difficult. High benefit-sharing obligations could lead users to look for legal alternatives to an alignment with the multilateral system.	
Use of DSI	May yield more benefits for sharing at this stage than at the point of access. Is consistent with open access to data.	May be more challenging to identify point of use than point of access. May require a track and trace system. May deer use for non-commercial or high-risk commercial research, thereby hindering research and innovation. High benefit-sharing obligations could lead users to look for legal alternatives to an alignment with the multilateral system.	
Commercialization of DSI	More financial benefits may be available for sharing than at the point of access or use. Potential to raise significant revenue, depending on payment design. Is consistent with open access to data. Is less likely to hinder non-commercial research and innovation than at the point of access or use.	Difficult to attribute proportion of benefit to DSI use. Difficult to identify point of commercialization. May require a track and trace system, depending on payment design. High benefit-sharing obligations could lead users to look for means to avoid the multilateral mechanism.	
Unlinked to the use of specific DSI	May be simpler to administer than other triggers. Consistent with open access to data. Less likely to hinder research and innovation than at the point of access or use.	Potentially less equitable or inequitable depending on scope of sectors, products and payment design. High benefit-sharing obligations could lead users to look for legal alternatives to an alignment with the multilateral system.	

B. Payment	*Pros*		*Cons*	*Survey Responses*
Fee to access sequence data and/or related information	Subscription	Less likely to deter or limit access than a fee per access/download. Clear, predictable and straightforward for users. May be more practical than fee per access/download.	Inconsistent with open access to data. Would require implementation of new measures by databases, which might be legally and financially difficult.	
	Pay per access to/downloading of DSI	Clear, predictable and straightforward for users.	Inconsistent with open access to data. Would require implementation of new measures by databases, which might be legally and financially difficult. Likely to hinder research and innovation to a greater extent than the subscription option.	
Payment on products/ services associated with use of DSI	Consistent with open access to data.		Would require national legislation to implement. May require a track and trace system depending on scope of the products/services included.	
Income-based payments from sectors associated with the use of DSI	Percentage of turnover	Turnover data reported by businesses as part of accounting procedures. Since turnover is broader than sales, a relatively low percentage could be applied for the same funding level.	Turnover disclosure unlikely to be at the product/service level. Might have a negative impact on innovation through reducing the rate of return. If costs are passed through to consumers, this would increase prices and potentially create inflationary pressure.	
	Percentage of sales	Sales data reported by businesses as part of accounting procedures.	Would need a higher percentage contribution than payments based on turnover for the same funding level. See also cons associated with payment based on the percentage of turnover.	
	Percentage of profit	Would affect all sectors equally	Could hinder investment incentives owing to a reduction of the benefits associated with investment. Difficult to attribute profit to specific products/services associated with DSI. Profit data are not typically readily available. See also cons associated with payment based on the percentage of turnover.	

C. Scope of products/ services	*Pros*	*Cons*	*Survey Responses*
Products/services containing DSI	Would be a targeted application of benefit-sharing from the use of DSI.	May be challenging to attribute products/services to DSI. May require a track and trace system. Could create legal complexity and disincentivize compliance.	
Wider array of products / services	Is simpler to identify and implement than for specific products/services. Does not require a track and trace system for DSI .	Requires agreement on the extent of products/services/sub- sectors to be included.	
D. Voluntary option			
Voluntary contributions/ donations	Consistent with open access to data. Unlikely to hinder research and innovation. May not require a track and trace system for DSI.	Uncertainty in flow of funds. Relies entirely on incentives to donate.	

Table 4
Assessment of methods for calculating payment

Options for contribution to the fund			*Method for calculating payment*
Trigger points	Access to DSI		A cost-based approach to determining the payment amount is likely to be most feasible, as the data will not yet have been used and hence the impacts of use will have not yet been realized (in order for an income-based/externalities-based approach to be used). To determine an access fee upfront, estimates of the number of accesses or downloads over time across expected accessors are needed. Although a non-market-based approach may be feasible, users may not fully understand the benefits of the data and so a willingness to pay may be underestimated.
	Use of DSI		A cost-based approach to determine the payment amount is likely to be most feasible, as no income or externalities would yet have arisen from the use of the data. A non-market-based approach may also be feasible, for example, through a willingness to pay approach, as users are able to place a value on data at this point of the value chain. However, they may be incentivized to influence the estimate to a low value, and the uncertainty regarding the fee may deter them from using the data.
	Commercialization of DSI		An income-based approach to determine the payment amount would be feasible at this point of the value chain and be most feasible when applied retrospectively. It would also be possible to use a cost-based approach or a non-market-based approach at this point (the considerations noted above for these approaches would still apply for this trigger point).
	Unlinked to the use of DSI		A cost-based approach using willingness to pay or willingness to accept methods, or an externalities-based approach, is most likely.
Payment	Fee to access DSI and/or related information	Subscription	See discussion under access to DSI. To calculate a subscription fee, it will also be necessary to determine the frequency of payment.
		Per access/download	See discussion under access to DSI.
	Payment on products/services associated with use of DSI		If a payment is required on products/ services associated with the use of DSI such as lab equipment to generate the DSI and information technology to analyse the DSI, a cost-based approach will be needed to estimate the frequency and value of such equipment and services, as well as the total cost of DSI data provision. As the payment is at an early stage in the research and development process, income and externalities-based approaches are unlikely to be feasible, as impacts would not yet have been realized.
	Income-based	Percentage of: turnover sales profit	This is an income-based approach by definition. The percentage could be set at such a level as to achieve cost recovery or set higher in order to achieve a return on the access to the data, or lower if the cost is subsidized from elsewhere. This would therefore still require an assessment of the total costs of storing, processing and providing access to the data and the number of users for cost allocation.
		Percentage of sales	See above.
		Percentage of profit	See above.
Scope of products /services	Products/services containing DSI		It was not possible to estimate the specific products and services containing DSI.
	Wider array of products/services		See above.
Voluntary contributions			Depending on when the voluntary contribution is required (see discussion under trigger points), the amount to be paid could be determined using a non-market-based, income-based, cost-based or externalities-based approach.

Table 5

Disbursement of the funds: views on the extent to which proposed options meet the criteria set out in paragraphs 9 and 10 of decision 15/9

Options for disbursement of the funds		*Pros*	*Cons*	*Survey responses*
Funds go to	Government (global South)	Likely practical and feasible.	Limited certainty that indigenous peoples and local communities would be able to access funds.	
	Indigenous peoples and local communities (global South, potentially North as well)	Likely practical and feasible. Greater potential to respect the rights of indigenous peoples and local communities than the above option.	May be difficult to find a sufficient number of accredited entities to manage funds for all indigenous peoples and local communities.	
	Mix of Government and indigenous peoples and local communities	Likely more practical and feasible than other options. Could promote greater allocations to indigenous peoples and local communities. Could promote greater conservation and sustainable use of biodiversity.	Might carry a higher administrative cost.	
Funding what	Government priorities	Likely practical and feasible.	Effectiveness of conservation and sustainable use of biodiversity will depend on government priorities.	
	Biodiversity conservation and sustainable use	Will support conservation and sustainable use of biodiversity.	May involve a costly monitoring system to ensure that funds are used for intended purposes.	
On the basis of	Projects	Likely to provide a moderate degree of predictability. Easier to target impact of projects on conservation and sustainable use of biodiversity.	Risk that some countries will not receive any funds. Risk that the funding distribution will reflect the capacity of countries to deal with the project application process.	
	Allocations[a]	Likely practical and feasible. Provides certainty and legal clarity owing to their predictable nature.	Risk that some countries might not have the capacity to earmark the funds.	

[a] See document CBD/WGDSI/2/2 for an explanation of the lump sum allocation to Parties according to a formula agreed by the Conference of the Parties.

Table 6

Non-monetary benefit-sharing: views on the extent to which proposed options meet the criteria set out in paragraphs 9 and 10 of decision 15/9

Options for non-monetary benefit-sharing	*Pros*	*Cons*	*Survey responses*
Non-monetary benefit-sharing addresses the broad needs for the conservation and sustainable use of biodiversity.	Likely to include a wider array of non-monetary benefits. More likely to take into account the rights of indigenous peoples and local communities. Will benefit from best practices from a number of existing initiatives. Likely to directly contribute to conservation and sustainable use of biodiversity.	Will not help to address the capacity gap to generate, access, use, analyse and store DSI. Without a strong coordination with other initiative, could be overlapping with existing efforts.	
Non-monetary benefit-sharing supports closing the gap to generate, access, analyse, use and benefit from DSI	Will benefit from best practices from some existing initiatives. Addressing the capacity gap to generate, access, use, analyse and store DSI will, in the long term, benefit the whole of society. Could indirectly contribute to conservation and sustainable use of biodiversity.	More difficult to ensure the inclusion of indigenous peoples and local communities. Less likely to directly impact conservation and sustainable use of biodiversity.	

Table 7

Governance: views on the extent to which proposed options meet the criteria set out in paragraphs 9 and 10 of decision 15/9

Options for governance		*Pros*	*Cons*	*Survey responses*
Degree of independence	Under the authority of the Conference of the Parties	May promote stronger consistency with other objectives of the Convention on Biological Diversity. May benefit from current collaboration with other access and benefit-sharing instruments at the Secretariat.	May require an increase in capacity of the Secretariat to the Convention.	
	Operational autonomy	n/a	n/a	
Party representation	Regional balance – five regions under the Convention on Biological Diversity	Would be aligned with the regional balance in the Bureau of the Convention on Biological Diversity, generating clarity and predictability.	n/a	
	North/South balance	Would be aligned with governance models from other hosts, such as the Global Environment Facility.	n/a	
Other members	Indigenous peoples and local communities as observers/full members	Would ensure alignment with the rights of indigenous peoples and local communities – possibly to a greater extent with respect to full membership status. Likely to promote conservation and sustainable use of biodiversity.	The inherent diversity within indigenous peoples and local communities globally would require a number of seats on the governing body.	
	Private sector as observers/full members	Private sector would likely appreciate the opportunity to understand decisions regarding the spending of their contributions.	Full membership would need to be carefully balanced regionally and could hinder the authority. of Parties to the Convention on Biological Diversity.	
	Other stakeholders as observers/full members	Unclear, depending on the viewpoint they bring.	Unclear, depending on the viewpoint they bring. Full membership would need to be carefully balanced regionally and could hinder the authority of Parties to the Convention on Biological Diversity.	

Table 8
Other policy options: views on the extent to which proposed options meet the criteria set out in paragraphs 9 and 10 of decision 15/9

Other policy options	*Pros*	*Cons*	*Survey responses*
In parallel with the multilateral mechanism, a list of species and/or geographical areas from which the DSI was extracted would be maintained under a bilateral mechanism established on standardized mutually agreed terms.	Exemptions of a list of endemic and/or sacred species could be supportive of the rights of indigenous peoples and local communities.	A hybrid approach may be inefficient, impractical and unfeasible. Exemptions could create uncertainty. Potentially inconsistent with open access to data. May hinder some research and innovation.	
Parties may opt out of the multilateral mechanism and, instead, establish their own access and benefit-sharing legislation, which would include DSI.	An opt-out option could potentially be feasible if it does not affect the publication of data in public databases.	Requirement to navigate both a multilateral mechanism and bilateral ABS mechanisms for DSI would not be efficient, feasible or practical. The stacking of systems would create legal uncertainty It might lead to jurisdiction shopping for those Parties and hinder research and innovation. The Parties would need the capacity to enforce their own legislation.	

IV. Conclusions of the studies

26. Based on the above discussions, and recalling the limitations of the studies, the following conclusions have been identified:

(a) On fund contributions:

(i) Payment linked to access to DSI may be incompatible with open access to data and could have a negative impact on research and innovation;

(ii) Any modality that involves a track and trace system raises concerns in terms of feasibility, cost and administrative complexities. Triggers at the point of access to DSI, on the use of DSI by entire sectors, or those unlinked to DSI do not require track and trace;

(iii) Payment triggers related to commercialization and the use of DSI at a sectoral level – but unlinked to specific use of DSI – were considered more positively by stakeholders compared with those related to access to DSI and upstream use of DSI as trigger points;

(iv) Such payment triggers, set in the range of 0.1 to 1 per cent of revenue, are estimated to have the potential of generating contributions to the fund in the order of 1 billion to 10 billion United States dollars per annum.

27. For such payment triggers, however, it would be necessary, to identify the specific products or services or the sectors or subsectors that would be included, with the identification of products and services being more complex than the identification of sectors or subsectors.

(b) On fund disbursement:

(i) Project-based approaches would provide oversight of what the funds are spent on but would be administratively costly and might increase the gap between Parties able to participate in those competitive processes;

(ii) Disbursing funds directly to indigenous peoples and local communities could help to recognize the rights of indigenous people and local communities, including with respect to the traditional knowledge associated with the genetic resources that they hold;

(iii) Across all modalities, transparency on how the funds are used is very important;

(c) On non-monetary benefit-sharing:

(i) Non-monetary benefit-sharing could address conservation and sustainable use of biodiversity or the current capacity gap with respect to generating, accessing, using, analysing and storing DSI, or a combination of both.

28. Regarding governance arrangements, the majority of the respondents who expressed a view noted that the multilateral mechanism should operate under the authority of the Conference of the Parties to the Convention on Biological Diversity and with regional balance regarding governance arrangements. The majority recognized that indigenous peoples and local communities as well as other stakeholders should be involved in the work of the governing body.

29. Overall, a simple, transparent, cost-effective harmonized approach to the multilateral mechanism would promote participation by stakeholders. A structured, incremental approach could enable feedback, review and updating the measures of the fund for generating funds and effective fund disbursement.