TEMPLATE FOR COMMENTS

Contact information	
Surname:	
Given Name:	
Government	
(if applicable):	
Organization:	
E-mail:	
Title of document reviewed:	The Emergence and Growth of Digital Sequence Information in Research and Development: Implications for the Conservation and Sustainable Use of Biodiversity, and Fair and Equitable Benefit-Sharing – A Fact-Finding and Scoping Study Undertaken for the Secretariat of the Convention on Biological Diversity

Comments on the draft fact-finding and scoping study		
Page #	**Para #**	**Comment**
		Parties and stakeholders can benefit immensely from viewing one another's reviews. The "comments for peer review" were written not just for the authors' benefit but also for the benefit of the peers. They should be uploaded to the relevant webpage.
7	22	Page 18 paragraph 24 states that study took 3 months.
18	24	Page 7 paragraph 22 states that study took 4 months.

19	14	By saying "in contrast to tangible physical genetic resources as defined within the Convention" the study is implying an interpretation of the scope that is not in agreement with the interpretation of most of the Parties to the Convention. Most Parties understand that **intangible genetic resources are defined within the Convention**. The consequences of the misinterpretation extend to ABS policy and are evidenced by the pejorative "speculative" to describe "monetary benefits". Should genetic resources be misinterpreted as just "matter," then the price will be negligible as Providers compete in offering biological samples. Recognition of genetic resources as information implies that an "economic rent" is justified in the benefit to be shared, similar to the economic argument in favour of intellectual property. Hence, "monetary benefits" are not "speculative" when "genetic resources" are interpreted as information. To reiterate, Brazil understands that the term "material" should not be confused with the term "matter". The definition of the word "material" allows the interpretation of the term to include the set of information associated with the genetic resource, that is, the substrate information or working material. The technical scope and legal and scientific implications of existing terminology related to digital sequence information on genetic resources is within the mandate of the AHTEG and should not be subject to interpretation by the Fact Finding and Scoping Study. **The text from line 14 to 17 should be altered from:** "A related term and concept with implications for this discussion, also raised in many recent submissions in response to decision XIII/16, is that of intangible genetic resources, which include digital sequence information, in contrast to tangible physical genetic resources as defined within the Convention." **To:** "A related term and concept with implications for this discussion, also raised in many recent submissions in response to decision XIII/16, is that of intangible genetic resources, which include, inter alia, digital sequence information, in contrast to tangible physical genetic resources."
48	17	This is a very negative and judgemental affirmative. It discriminates diverging opinions among the Parties of CBD and Nagoya Protocol as one that only seeks the common good for the public vs. another which has self-centred intentions. Such subjective and biased opinions have no place in a fact-finding study. **The text from line 17 to 20 should be deleted:** ~~This includes different approaches to access, with some promoting the wide and free exchange of knowledge, materials and technologies to achieve public benefits, and others seeking to restrict access in order to "capture some of those benefits for a narrow and defined public" (Lawson and Rourke, 2016).~~

53	15	This part of the study is lacking in data that was expected to be investigated and provided and it's also missing the point: how much of the global economy is related to the commercial use of products or process arising from access to genetic resources? How much of this share might be coming from the use of digital sequence information? Most Parties have not defined parameters for the sharing of benefits arising from the use of digital sequence information. The study envisages only one approach or model for it, one that could possibly be the most unfavourable and adverse model for research and development: paying for the use of the digital sequences itself. What about benefit sharing derived from commercial profiting of processes or products developed from the use of digital sequence information? The fact-finding scoping study was not investigative enough on the possibilities, approaches or models for the benefit sharing for the use of digital sequence information. If products derived from the use of DSI are considered as being subject to benefit sharing, monetary benefits cannot be speculative, as the products do have a specific and mensurable value. Additionally, and linking with the comments on page 19 paragraph 16, the consequences of the misinterpretation extend to ABS policy and are evidenced by the pejorative "speculative" to describe "monetary benefits". Should genetic resources be misinterpreted as just "matter," then the price will be negligible as Providers compete in offering biological samples. Recognition of genetic resources as information implies that an "economic rent" is justified in the benefit to be shared, similar to the economic argument in favour of intellectual property. Hence, "monetary benefits" are not "speculative" when "genetic resources" are interpreted as information. **The paragraph between line 15 and 17 should be altered to:** Monetary benefits growing from the use of digital sequence information ~~are largely speculative to date, and~~ are potentially complex due to challenges in identifying provenance ~~and the value of any given sequence or part~~.
53	20	The panorama of monetary benefit sharing from commercial use were not adequately explored. The study states that "the practicalities of implementation remain undeveloped". How so? At the Nagoya Protocol level? At the level of domestic legislations? Have any Parties made efforts to implement and adopt practical procedures for benefit sharing from digital sequence information? If undeveloped at international or domestic level, what is the reason? Brazil has included benefit sharing provisions for products arising from the use of digital sequence information in its Law (Law 13.123/2015). Several steps towards its implementation have already been established by Decree No 8.772/2016. **The text in line 20 should be deleted:** ~~The practicalities of implementation remain undeveloped, however.~~

53	38	Linking with the comments on page 53 paragraph 15 and paragraph 20: The study only exposes a predisposed and one-sided view about the possibilities and models for the benefit sharing arising from the use of DSI and does not explore other models that could be beneficial for research and development and relevant to conservation of biodiversity. The Brazilian Law No 13123/2015 and Decree that regulate access and benefit sharing in Brazil have already recognized access to dematerialized genetic resources in its framework, without the need for access to the physical sample as such. Thus, the regulation of Law 13,123/2015 provides that research utilizing genetic information obtained *in silico* is to be carried out freely, and that registration is required only at the time of publication of the results, or upon application for a patent, or before introduction of a product on the market. Economic exploitation is the point of incidence of benefit sharing obligation. **The text should include the following sentence:** "Some models for the sharing of monetary benefits for the use of digital sequence information foresee the economic exploitation of products derived of such use as the point of incidence for benefit sharing obligations"
53	41	Linking with comment on page 53 paragraph 38: there should have been less effort in determining the value of digital sequence information *per se* and more efforts on identifying the value of commercial products or processes arising from the use of digital sequence information. **The study should include a text** explaining that the investigation on monetary benefits was inconclusive since the study was lacking bibliography on determining value of commercial products or processes arising from the use of digital sequence information.
56	29	In addition to citing an individual opinion, this text is propagating a false idea about legislation in India and Brazil. Law No 13,123/2015 does not restrict use of digital sequence information or access to physical samples of genetic resources. In the Brazilian legislation PIC was granted by the National Congress for any research or development with access to genetic resources, whether obtained from a physical sample or from digital sequence information. There are no administrative procedures for PIC when accessing GR. There is the need of registration prior specific events, but the registration is not needed prior to access itself in the Brazilian Law. **The text from line 29 to line 31 should be deleted:** ~~"Just because India or Brazil or some other country wants to place restrictions on the material they hold doesn't mean I can't find something similar and just as useful in some other geographic area."~~