

## Comments of Argentina

<b>Title of document reviewed:</b>  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			
<b>Comments on the draft fact-finding and scoping study</b>			
Country	Page #	Para #	Comment
ARG	General Comment		<p>The study seems to be quite biased in favor to national interests of those countries that have databases or that are mostly users of the information stored in those databases, registers, etc. and also have technology and infrastructure to use this information.</p> <p>In this sense, no quotation was found referring to the document UNEP/CBD/WG-ABS/9/INF/1 "The concept of 'genetic resources' in the convention on Biological Diversity and how it relates to a functional international regime on access and benefit-sharing" requested by the Ad Hoc Open-ended Working Group on Access and Benefit-sharing, at its eighth meeting held in Montreal, from 9 to 15 November 2009, which established that the scope of the Nagoya Protocol covers the genetic information that can be read, digitized and easily acquired. If this point is not expressly stated then it could be useless to analyze the relevance of the Nagoya Protocol, the ABS rules and the challenges that ABS can present in relation to digital sequence information.</p> <p>In general terms, this study seems to conclude that the interest of those countries that supply genetic resources should be satisfied by the fact of being able to have open, free and free access to the bases of data that contains that information; and this type of non-monetary benefits could</p>

			be considered sufficient under the Protocol and ABS rules. However, while these types of benefits are those that could be privileged and probably they occur in most cases, it is necessary to recognize that States retain the power to negotiate monetary benefits over digital information as well. This position should be introduced into the study. Otherwise, it seems to show uniformity and consensus on topics where it does not exist.
ARG	7	22-25	As it is mentioned in the Executive Summary this report is a research that took place over four months, and included a literature review, as well as semi-structured interviews with academic researchers, industry representatives, database managers, civil society groups, policy makers, and others. In total, 55 individuals from 17 countries were 25 interviewed. Due not all Parties, non-Parties and organization were represented; this report should be taken with precautions, particularly textual dicit of interviews, because these expressions are able to influence the position of other Parties which did not participate.
ARG	9	34-40	When referring to "How digital sequence information is accessed, stored, and managed" it is important to mention local initiatives of databases that could enable control of access of sequence data. For example, Argentina has a National Sequence data base (Sistema Nacional de Datos Genómicos, SNDG, <a href="http://www.datosgenomicos.mincyt.gob.ar/">http://www.datosgenomicos.mincyt.gob.ar/</a> )
ARG	10		When discussing "Generation of 'new' digital sequence information from physical samples" authors only refer to MinION technology, however, actually largest part of new sequences come from Illumina Platforms, which due to new technical advances, will become even cheaper. Argentina suggests adding this information for the sake of completeness.
ARG	11	37-39	The study should not only talk about "In most approaches, negotiation of an agreement between a commercial user and a contributor of sequence information is envisioned at some point in the future, eleven a commercial use has been established". The inclusion of ABS arrangements under

			the Protocol between users and the country of origin of the genetic resources, including digital information obtained from them, should be included in order to have a more balanced study.
ARG	12	1-4	Argentina draws attention to the fact that the study affirms that "A number of websites and databases include the conditions of use of that information that should include the assertion that digital sequence information is the patrimony of the country of collection, that users of the information agree to acknowledge the country of origin in any publication, or that national focal points should be contacted if sequence information is used for commercial purposes", however, it does not refer to the position of those countries that support the opposite, this is that information is under the sovereignty of the countries that supply the genetic resources because it falls within the concept of genetic resources. Argentina would appreciate the inclusion of both visions.
ARG	15	4 (among other references)	The adjective "largely speculative" for monetary benefits should be revised in function of real number and quantifiable monetary benefit of the use of DSI in the ABS systems so far or till to have an assessment of the MTA, licenses and use agreements that have had a monetary benefit in the framework of Nagoya Protocol and out of this. These numbers could reveal if this conclusion was true.
ARG	15		When referring to "Monetary benefits" author states that "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." This statement is largely misleading and tries to undercut the value of sequence information, there are plenty of real examples of how to draw monetary benefits from their use and how it is possible to identify provenance and value. Actually, due to its digital nature it is quite easy to identify and control the use of sequence information, provided there are technical resources.

	16 17 39 62 84 (footnot e 39)	29 3 4 20 4	It is advisable to avoid distinguishing "material and information" as two different matters. Taking into account that CBD and Nagoya Protocol refer to "genetic resources" as material containing functional units of heredity, the aforementioned distinction could imply the recognition that genetic information provided by DSI is not covered by international treaties and this conclusion needs to be defined by Contracting Parties.
ARG	17	19-20	The author concludes that "physical samples are still of interest to researchers, but their role in the research and commercialization process is changing, and the future is unclear". In the study, this conclusion is not clear, may be for the lack of data of the use of DSI in innovation and their commercialization. The study gives a panorama of the academic research, but little information is provided regarding potential changing in the process of commercialization mentioned. Much information in this regard would be appreciated.
ARG	19		It is true that the concept DSI is not employed within scientific or database circle, so it should be revised and harmonized. It is not clear how it has grown from the CDB policy process. Argentina suggests this report may enlighten the origin of this concept to precise the starting point of the issue.
ARG	19	35	Include "the Secretariat of the" ITPGRFA. This is because the scoping study was requested by the Secretariat, not by Contracting Parties of the ITPGRFA.
ARG	23	20-23	The terms "natural" or "artificial" should be taken with precaution because one DSI obtained of natural resources should be modified to obtain a synthetic sequence (copy DNA or DNAc, or include a new codon uses or have non-conventional nucleotides or just became from a chemical synthesizer). Again, the scope of DSI or the term used should be carefully analyzed.

ARG	25	39	The paragraph describes the widely used genetic engineering methodology, which is used in synthetic biology too, but it does not constitute an exclusive methodology of synthetic biology.
ARG	36	15-28	Policy about digital to biological converter technology should be developed by CDB or presented for consideration as a new issue in SBSTTA.
ARG	39-42		These examples show that "Conditions of Use Notices" and "User Agreements" should be harmonized. This could be a topic to develop a CDB guidance.
ARG	49	36	Replace "higher income countries" by "developed countries". This is because "higher income countries" is not a category used in the Convention. In case this expression is a quote, please include quotation marks.