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AD HOC TECHNICAL EXPERT GROUP ON SYNTHETIC BIOLOGY
Montreal, Canada, 5-8 December 2017
Item 3 of the provisional agenda*

BACKGROUND DOCUMENTS PROVIDED TO FACILITATE DELIBERATIONS BY THE AD HOC TECHNICAL EXPERT GROUP ON SYNTHETIC BIOLOGY

1. In response to paragraph 10 of decision XIII/17, the Executive Secretary issued a notification on 16 March 2017 inviting Parties, other Governments, relevant organizations and indigenous peoples and local communities to submit information and supporting documentation on the topics referred to in the decision.

2. A total of 29 submissions were received by the Secretariat. Among the submissions, 15 were from Parties, one from a non-Party, and 13 from organizations.[1]

3. Several submissions cited or included electronic copies of documents which have already been published elsewhere. A list of these documents is available as in annex I.

4. Furthermore, the Open-ended Online Forum on Synthetic Biology was convened through the Biosafety-Clearing House[2] between July and September 2017.

5. Under the second topic of discussion focusing on "Further analysis of evidence of benefits and adverse effects of organisms, components and products of synthetic biology vis-à-vis the three objectives of the Convention" a number of references supporting the claims of either the benefits or adverse effects of such organisms were included. These references are listed in in annex II.

6. Finally, under the fourth topic of discussion focusing on "Gathering information on risk management measures, safe use and best practices for safe handling of organisms, components and products of synthetic biology" a number of references were cited relating to guidelines and guidance on risk management measures that may be applicable to organisms, components and products of synthetic biology. These references are listed in in annex III.

* CBD/SYNBIO/AHTEG/2017/1/1.

[1] The notification and submissions are available online at http://bch.cbd.int/synbio/submissions/2017-2018.shtml.

[2] The discussions under the Open-ended Online Forum on Synthetic Biology are available at http://bch.cbd.int/synbio/open-ended/discussion/

Annex I

LIST OF DOCUMENTS CITED OR INCLUDED AS ELECTRONIC COPIES IN THE SUBMISSIONS

TITLE	SUBMITTED BY
ACB (2017). **Biosafety Considerations of Novel Plant Breeding Techniques**. African Centre for Biodiversity, Johannesburg	TWN
ACB (2017)**. Biosafety Risks of Genome Editing Techniques in Plant Breeding.** African Centre for Biodiversity, Johannesburg	TWN
Agapito-Tenfen, S.Z. (2016) **Biosafety aspects of genome-editing techniques.** Biosafety Briefing, Third World Network, Penang and African Centre for Biodiversity, Johannesburg.	TWN
Agapito-Tenfen, S.Z. and Wikmark, O.-G. 2015 **Current status of emerging technologies for plant breeding: Biosafety and knowledge gaps of site directed nucleases and oligonucleotide-directed mutagenesis** GenØk Biosafety Report 02/15, 43p.	GenØk - Centre for Biosafety
Akbari et al., **Safeguarding gene drive experiments in the laboratory.** Science https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4692367/pdf/nihms-745460.pdf	Imperial College London
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Areal, F. J., L. Riesgo and E. Rodriguez-Cerezo. 2013. **Economic and agronomic impact of commercialized GM crops: A meta-analysis**. Journal of Agricultural Science 151: 1: 7-33.	Center for the Study of Science and Innovation Policy
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Ayobami AS, Valesca A, Vidal BF, Vasco A (2013) **Biotechnology and agriculture,** Journal of Biosafety and Health Education 1:2. doi: 10.4172/jbhe.1000103.	Global Industry Coalition
Bagley, M. (2015) **Digital DNA: The Nagoya Protocol, Intellectual Property Treaties, and Synthetic Biology**. http://www.synbioproject.org/site/assets/files/1395/digital_dna_final.pdf?	North Carolina State University

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Bergeson, L. et. al. (2015) **The DNA Of The U.S. Regulatory System: Are We Getting It Right For Synthetic Biology?** http://www.synbioproject.org/site/assets/files/1388/synbio_reg_report_final.pdf	North Carolina State University
Biden, S. 2016**. Comparing the Adoption of Genetically Modified Canola in Canada and Australia: The Environmental and Economic Opportunity Costs of Delay**. University of Saskatchewan Masters' of Science Thesis.	Center for the Study of Science and Innovation Policy
Biofuelwatch. 2016. **Beware False Promises: Algal Oils and Other Products of Synthetic Biology Aren't About to Save the Orangutan.... But Carry Serious New Risks.** http://www.biofuelwatch.org.uk/2016/synbio-and-palmoil-briefing/	Biofuelwatch
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Drinkwater, K., et. al. (2014) **Creating A Research Agenda For The Ecological Implications Of Synthetic Biology**. https://www.wilsoncenter.org/sites/default/files/SYNBIO_create%20an%20agenda_v4.pdf	North Carolina State University
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Annex II

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Annex III

LIST OF REFERENCES CITED DURING THE ONLINE DISCUSSION ON GATHERING INFORMATION ON RISK MANAGEMENT MEASURES, SAFE USE AND BEST PRACTICES FOR SAFE HANDLING OF ORGANISMS, COMPONENTS AND PRODUCTS OF SYNTHETIC BIOLOGY

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