

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Eighteenth meeting of the Conference of the Parties
Colombo (Sri Lanka), 23 May – 3 June 2019

Interpretation and implementation matters

Regulation of trade

SPECIMENS PRODUCED FROM SYNTHETIC OR CULTURED DNA

1. This document has been submitted by the Standing Committee.*

Background

2. At its 17th meeting (CoP17, Johannesburg, 2016), the Conference of the Parties adopted Decisions 17.89 to 17.91 on *Specimens produced from synthetic or cultured DNA*, as follows:

Directed to the Secretariat

17.89 *The Secretariat, subject to external funding, is requested to:*

- a) *undertake a review of relevant CITES provisions, resolutions and decisions, including Resolution Conf. 9.6 (Rev. CoP16) on Trade in readily recognizable parts and derivatives, to examine how Parties have applied the interpretation of Resolution Conf. 9.6 (Rev. CoP16) to wildlife products produced from synthetic or cultured DNA, under what circumstances wildlife products produced from synthetic or cultured DNA meet the current interpretation, and whether any revisions should be considered, with a view to ensuring that such trade does not pose a threat to the survival of CITES-listed species; and*
- b) *report the findings and recommendations of this study to the 29th meeting of the Animals Committee, the 23rd meeting of the Plants Committee, and the 69th meeting of the Standing Committee.*

Directed to the Animals and Plants Committees

17.90 *At the 29th meeting of the Animals Committee and the 23rd meeting of the Plants Committee, the Animals and Plants Committees are requested to review the findings and recommendations of the Secretariat's report in Decision 17.89 and make recommendations for consideration at the 69th meeting of the Standing Committee, including appropriate revisions to existing resolutions.*

Directed to the Standing Committee

17.91 *At its 69th meeting, the Standing Committee is requested to review the findings and recommendations of the Secretariat's report in Decision 17.89 and the recommendations of the Animals and Plants Committees, and make recommendations for consideration at the 18th*

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

meeting of the Conference of the Parties, including appropriate revisions to existing resolutions.

3. The Standing Committee, at its 69th meeting (SC69, Geneva, November 2017) reviewed the Secretariat's report on the progress made, and established an intersessional working group on synthetic or cultured DNA with a mandate to:
 - a) review the findings and recommendations of the Secretariat's report in Decision 17.89 and the recommendations of the Animals and Plants Committees, and
 - b) make recommendations for consideration at the 70th meeting of the Standing Committee, including appropriate revisions to existing resolutions.

The membership of the working group was agreed as follows: Mexico (Chair), Austria, Cameroon, Canada, China, Israel, Peru, Republic of Korea, South Africa, Switzerland, United Kingdom of Great Britain and Northern Ireland and the United States of America; and Center for Biological Diversity, Lewis & Clark – International Environmental Law Project, MEA Strategies, Natural Resources Defense Council, San Diego Zoo Global, Species Survival Network, Wildlife Conservation Society, and World Wildlife Fund.

4. In undertaking the study pursuant to Decision 17.89 paragraph a), the Secretariat recruited a consultant in accordance with the United Nations rules and regulations. The terms of reference of the study can be found in Annex 2 to document [SC70 Doc. 33](#). The Secretariat also issued Notification to the Parties [No. 2018/013](#) on 29 January 2018 to collect information on cases where they have issued (or not issued) CITES permits and certificates for bioengineered specimens. Of the four responses received, one Party has reported to have issued permits issued deemed to be products of bioengineering, and one Party expressed it did not determine whether permits had been issued for specimens based on bio-engineered, synthetic, or cultured DNA.¹
5. The Animals and Plants Committees, at their joint session of the 30th meeting of the Animals Committee and 24th meeting of the Plants Committee (AC30/PC24, Geneva, July 2018), reviewed the draft study on "Wildlife products produced from synthetic or cultured DNA" along with the Secretariat's summary of the findings on the technological and scientific elements. The Committees agreed that the title of this subject matter should be changed from "specimens produced from synthetic or cultured DNA" to "specimens produced through biotechnology" in order to encompass the wider range of techniques and technologies that need to be considered. However, they refrained from making any specific recommendations on the content of the study for consideration by the Standing Committee. Instead, they agreed that decisions should be drafted and submitted to the Conference of the Parties at its 18th meeting so that the study on specimens produced through biotechnology could be presented to the Animals and Plants Committees at their next joint session in 2020 (as proposed in decision 18.BB).
6. The intersessional working group worked virtually under the guidance of the working group Chair and supported by the Secretariat. It reviewed and provided feedback to the draft study and the Secretariat's summary between May and August 2018. The final study and the Secretariat's findings and recommendations was presented to the Standing Committee at its 70th meeting (SC70, Sochi, October 2018).
7. The Secretariat's summary of its final findings and recommendations on the study was as follows²:
 - a) Although only few applications are commercially available or known today, biotechnologies, combined with other technological tools such as three-dimensional printing, would allow vast possibilities for making synthetic specimens of almost any CITES-listed species that closely mimic both the physical appearance and biological characteristics of their wildlife counterparts.
 - b) The technologies are evolving constantly, and may pose an increasingly complex landscape to identify, let alone regulate, considering that some will be extremely difficult to differentiate by visual or analytical means.

¹ The result of the responses received in the Notification can be found in Annex 3 to document SC70 Doc. 33.

² See document SC70 Doc. 33, paragraphs 12-18 for details.

- c) In cases where they are indistinguishable, all specimens are suggested to be regulated as if they were from the wild. Even in cases where they can be differentiated, some form of regulation may be necessary. In these cases, the synthetic specimens produced through biotechnology may be considered to fit into the operational definition of the term for 'part' in Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*.
 - d) Should a need arise to create exemptions or simplified procedures to demonstrate that the specimen was produced through biotechnology, the study suggests a number of options may be used to make them 'readily recognisable,' for which there are a number of possible means. The study does not make any conclusive remark on which options should be suitable, or precisely what should be regulated, and how. The Secretariat notes that this would require careful consideration by Parties.
 - e) A number of additional issues may benefit from further investigation and consideration as they may affect the legal interpretation and implementation of the regulation of specimens produced from biotechnology. This includes: specimens produced through biotechnology using 'naturally excreted waste products'; harmonising with the discussion on the definition of the term 'artificially propagated' [Decision 17.175-17.177, 16.156 (Rev. CoP17)]; application of Article II paragraph 2 b) of the Convention and Resolution Conf. 9.24 (Rev. CoP17) on *Criteria for amendment of Appendices I and II*; previous cases and discussions at past meetings of the Conference of the Parties; and other potential cases.
 - f) Additional issues of potential consideration were also raised by the members of the working group and during the discussion at the joint session of AC30/PC24, which were: conservation effects of the use and release into the environment of CITES-listed specimens produced through biotechnology; and socioeconomic implications, including the likelihood of potential market opportunity for both legal and illegal traders, and how to apply a "precautionary approach".
8. At SC70, the intersessional working group noted the study enabled Parties to have a stronger understanding of options and potential challenges posed by specimens produced from synthetic and cultured DNA. The working group discussed the need for more clarity on the terms used to denote these specimens, and the need to identify how trade in these specimens may impact species' survival. The urgency of the issue and the need for proposals for consideration at CoP18 was noted, though the working group noted the need to be cautious and not give recommendations prematurely.
 9. At the suggestion of the intersessional working group, the Standing Committee established an in-session working group with the mandate to review the information and recommendations referred to in document SC70 Doc. 33; propose changes to the draft decisions on *Specimens produced through biotechnology* contained in Annex 1 to document SC70 Doc. 33 based on the comments made during the plenary session; and consider any further recommendations on the way forward in regulating specimens produced through biotechnology, as needed.
 10. The membership of the working group was agreed as follows: Mexico (Chair), France, Norway and the United States of America; and Center for Biological Diversity, China Wildlife Conservation Association, Lewis and Clark – International Environmental Law Project and San Diego Zoo Global.
 11. The in-session working group³ considered the treatment of specimens, parts and derivatives of CITES-listed species produced through biotechnology in the context of Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives*, and provided advice for consideration of the Standing Committee. In fulfilment of Decision 17.91, the Standing Committee agreed to submit four draft decisions on specimens produced through biotechnology for consideration by the Conference of the Parties at its 18th meeting.

Recommendations

12. The Conference of the Parties is invited to adopt the draft decisions as follows:

Specimens produced through biotechnology

Directed to the Parties

³ See document SC70 Com. 5.

- 18.AA Parties are invited to provide information to the Secretariat regarding:
- a) cases where they have issued, or received requests to issue, CITES permits and certificates for specimens produced through biotechnology;
 - b) other situations when they have applied the interpretation of Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives* to fauna and flora products produced through biotechnology; and
 - c) technological developments and applications taking place, particularly in their jurisdiction, that may result in the manufacture of specimens produced through biotechnology that may have impact on the interpretation and implementation of the Convention.

Directed to the Animals and Plants Committees

- 18.BB The Animals and Plants Committees shall:
- a) review the complete study on “Wildlife products produced from synthetic or cultured DNA”, and make recommendations for consideration by the Standing Committee, including appropriate revisions to existing resolutions; and
 - b) provide any relevant scientific advice and guidance on matters relevant to international trade in specimens produced through biotechnology and communicate it to the Standing Committee, as appropriate.

Directed to the Standing Committee

- 18.CC The Standing Committees shall:
- a) discuss how to apply the term “readily recognizable part or derivative” to trade in products of biotechnology, which might potentially affect international trade in CITES-listed specimens in a way that would threaten their survival;
 - b) communicate to the Animals and Plants Committees any matters that may require scientific advice and guidance, as appropriate; and
 - c) make recommendations for consideration at the 19th meeting of the Conference of the Parties, including appropriate revisions to existing resolutions or the development of a new resolution on trade in specimens produced from biotechnology.

Directed to the Secretariat

- 18.DD The Secretariat shall:
- a) present the study on “Wildlife products produced from synthetic or cultured DNA”, along with the Secretariat’s findings and recommendations, to the Animals and Plants Committees;
 - b) collate information received from Parties in relation to Decision 18.AA, as well as any other information received from Parties, governmental, intergovernmental and nongovernmental organizations and other entities related to the issue of specimens produced through biotechnology;
 - c) communicate with the Secretariat of the Convention on Biological Diversity (CBD), the United Nations Food and Agricultural Organization (FAO), the International Union for Conservation of Nature (IUCN) and other relevant organizations as appropriate, to keep abreast of the discussions taking place on other fora on issues that may be relevant to specimens produced through biotechnology; and
 - d) report progress to the Animals and Plants Committees, and the Standing Committee, as appropriate.

COMMENTS OF THE SECRETARIAT

- A. The Secretariat agrees with the general observations and the recommendations of the Standing Committee.
- B. Considering that the Standing Committee has moved on to discuss the interpretation of Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives* as it applies to fauna and flora products produced through biotechnology, the Animals and Plants Committees may also wish to expand its task beyond simply reviewing the background study that was commissioned by the Secretariat during this intersessional period. It would be important that the scientific committees keep abreast of the most up-to-date developments in this rapidly evolving subject and raise any relevant matters to the attention of the Standing Committee.
- C. The Secretariat would therefore propose to add the following text to the draft decision 18.BB paragraph a):

Directed to the Animals and Plants Committees

18.BB The Animals and Plants Committees shall:

- a) review the complete study on “Wildlife products produced from synthetic or cultured DNA”, monitor the most recent scientific and technological advancements and applications that may lead to the synthetic production of specimens of CITES-listed species, and make recommendations for consideration by the Standing Committee, including appropriate revisions to existing resolutions; and
- D. Furthermore, the Secretariat proposes some minor editorial changes to draft decision 18.DD. The resulting proposed draft decisions as amended by the Secretariat are found in Annex 1 to this document.
 - E. The Secretariat suggests that the proposed decisions 18.AA-18.DD on *Specimens produced through biotechnology* replace Decisions 17.89-91 on *Specimens produced from synthetic or cultured DNA*, and that the latter be deleted.

Draft decisions on Specimens produced through biotechnology

[with Secretariat's recommended amendments: text to be deleted is crossed out; proposed new text is underlined]

Directed to the Parties

18.AA Parties are invited to provide information to the Secretariat regarding:

- a) cases where they have issued, or received requests to issue, CITES permits and certificates for specimens produced through biotechnology;
- b) other situations when they have applied the interpretation of Resolution Conf. 9.6 (Rev. CoP16) on *Trade in readily recognizable parts and derivatives* to fauna and flora products produced through biotechnology; and
- c) technological developments and applications taking place, particularly in their jurisdiction, that may result in the manufacture of specimens produced through biotechnology that may have impact on the interpretation and implementation of the Convention.

Directed to the Animals and Plants Committees

18.BB The Animals and Plants Committees shall:

- a) review the complete study on "Wildlife products produced from synthetic or cultured DNA", monitor the most recent scientific and technological advancements and applications that may lead to the synthetic production of specimens of CITES-listed species, and make recommendations for consideration by the Standing Committee, including appropriate revisions to existing resolutions; and
- b) provide any relevant scientific advice and guidance on matters relevant to international trade in specimens produced through biotechnology and communicate it to the Standing Committee, as appropriate.

Directed to the Standing Committee

18.CC The Standing Committee shall:

- a) discuss how to apply the term "readily recognizable part or derivative" to trade in products of biotechnology, which might potentially affect international trade in CITES-listed specimens in a way that would threaten their survival;
- b) communicate to the Animals and Plants Committees any matters that may require scientific advice and guidance, as appropriate; and
- c) make recommendations for consideration at the 19th meeting of the Conference of the Parties, including appropriate revisions to existing resolutions or the development of a new resolution on trade in specimens produced from biotechnology.

Directed to the Secretariat

18.DD The Secretariat shall:

- a) present the study on "Wildlife products produced from synthetic or cultured DNA", along with the Secretariat's findings and recommendations, to the Animals and Plants Committees;

- b) collate information received from Parties in relation to Decision 18.AA, as well as any other information received from Parties, governmental, intergovernmental and nongovernmental organizations and other entities related to the issue of specimens produced through biotechnology;
- c) communicate with the Secretariat of the Convention on Biological Diversity (CBD), the United Nations Food and Agricultural Organization (FAO), the International Union for Conservation of Nature (IUCN) and other relevant organizations as appropriate, to keep abreast of the discussions taking place on other fora on issues that may be relevant to specimens produced through biotechnology; and
- d) share the information collated under paragraphs b) and c) and report progress on the implementation of this decision to the Animals and Plants Committees, and the Standing Committee, as appropriate.

TENTATIVE BUDGET AND SOURCE OF FUNDING
FOR THE IMPLEMENTATION OF DRAFT RESOLUTIONS OR DECISIONS

According to Resolution Conf. 4.6 (Rev. CoP16) on *Submission of draft resolutions, draft decisions and other documents for meetings of the Conference of the Parties*, the Conference of the Parties decided that any draft resolutions or decisions submitted for consideration at a meeting of the Conference of the Parties that have budgetary and workload implications for the Secretariat or permanent committees must contain or be accompanied by a budget for the work involved and an indication of the source of funding.

The proposed decisions will have no direct financial cost, but modest workload implications for the Animals, Plants and Standing Committees.