Amendment of Annotation °607 to read:

The following are not subject to the provisions of the Convention:

- a) synthetically derived DNA that does not contain any part of the original;
- b) urine and faeces;
- c) synthetically produced medicines or other pharmaceutical products such as vaccines that do not contain any part of the original genetic material from which they are derived and;
- d) fossils

Proponent: Switzerland.

Note: Annotation °607 currently only applies to corals (phylum Cnidaria) of the following taxa listed in Appendix II: Coenothecalia spp., Tubiporidae spp., Scleractinia spp., Milleporidae spp. and Stylasteridae spp. The proposal under consideration involves only an amendment to the wording of annotation °607 and makes no reference to widening its scope to apply to any other species listed in the Appendices. It appears therefore that the amended annotation, if adopted, would continue to apply only to those taxa covered at present (i.e. the aforementioned corals). However, from the supporting statement, the wording of the proposed amendment and discussion in Decision 11.87 and the documents referred to in the supporting statement (Doc.AC.16.21, SC45 Doc.10 and SC46 Doc.12) it is evident that the amendment is intended to cover many more species than just corals, although it is far from clear whether it is intended to cover plants and animals, or only animals. The following brief analysis will assume that it is was intended to cover all species in all Appendices.

Summary: This is a proposal to exempt all synthetically derived DNA (including pharmaceutical products that contain such DNA) and urine and faeces. The justification is to alleviate financial and administrative burdens in implementing the Convention and to expedite movement of specimens important for humane purposes, including the international movement of vaccines to combat human disease and of various kinds of samples for veterinary purposes such as diagnosis of animal diseases.

Analysis: Synthetically derived DNA does not present a conservation risk to threatened species in the wild. The annotation would essentially maintain a status quo for trade in samples such as urine and faeces which, prior to the advent of newer DNA identification and extraction technologies, were not considered readily recognisable specimens. The wording of paragraph c) in the proposed annotation would mean that many important pharmaceutical products such as vaccines which do contain original genetic material would still be subject to CITES trade controls if this material originated in specimens of species listed in the Appendices and not covered by any other appropriate annotation.

Supporting Statement (SS)

At CITES CoP 11, through Decision 11.87, a need was identified to remove the administrative and financial burden of international movement of certain time-sensitive pharmaceutical, research, enforcement and veterinary samples that have components originating from species listed in the Appendices. This Decision was taken forward in the Animals Committee and Standing Committee and a highly technical and complex debate evolved over the types of specimens that should be exempted from CITES controls or have expedited protocols for rapid international movement.

The complexity of the issue means that this work is still ongoing; however, certain specimen types have been identified as less contentious and the Standing Committee has proposed a solution for these specimens (SC46 Doc. 12).

The government of Switzerland was requested by the Standing Committee to deposit this proposed annotation to exclude certain specimens from CITES control.

Additional information

It is argued that this exemption will be of positive conservation importance, particularly concerning veterinary samples (urine and faeces), where the rapid movement of these samples is vital for accurate and timely diagnosis of disease, treatment or health monitoring (Cooper, 2002).

The difficulty enforcement personnel are likely to encounter in differentiating between exempt and non-exempt samples may be a problem. However, this problem exists currently as millions of vaccines containing traces of primate DNA cross international borders annually. As all primates except Homo sapiens are currently included in the Appendices, these vaccines are theoretically covered by the provisions of the Convention. However, this trade takes place effectively outside CITES controls.

a) Synthetically derived DNA that does not contain any part of the original

Synthetically derived DNA can be produced either by direct chemical synthesis or by biological activity in vitro and does not, therefore, pose a risk to threatened species in the wild. Ready availability of

DNA could actually be beneficial by reducing the need to obtain freshly derived DNA (MacNicoll, 2002).

b) Urine and faeces

Several reviewers were of the opinion that naturallyshed materials, such as urine and faeces, should be exempt under CITES (eg. Bruford, 2002). Others were concerned that 'trade in urine and faeces may present a risk to endangered animals where these excretory products have a commercial value as in the case of traditional medicines.' (MacNicoll, 2002).

It is almost impossible to enforce controls on movement of urine and faeces samples, as detection of specimens at border controls and identification of specimens to species level is largely impractical.

c) Synthetically produced medicines and other pharmaceutical products such as vaccines that do not contain any part of the original genetic material from which they are derived

As noted above, the current wording of section c) in the proposal, if applied to all species in the Appendices would mean that many important pharmaceutical products such as vaccines which do contain original genetic material would still be subject to CITES trade controls if they originated in species listed in the Appendices and not covered by an appropriate annotation.

The exemption in the proposed annotation may also be misconstrued to assume that all medicines are exempt from CITES controls, and confusion may arise over those that contain derivatives of species listed in the Appendices, and particularly in Appendix I. Given the potential for abuse of such an annotation, some reviewers stated that the CITES Parties should consider a review of implementation at a later date to assess any negative consequences, were the proposal to be adopted (Mackay, 2002; TRAFFIC North America, 2002).

Reviewers: M. Bruford, M. Cooper, B. Ford, J. Hannum, C. Mackay, A. MacNicoll, S. Rennie, TRAFFIC International, TRAFFIC North America.

References:

Bruford, M., 2002., *in litt* to TRAFFIC International, Cambridge, UK. Cooper, M., 2002. *in litt*. to TRAFFIC International, Cambridge, UK. Mackay, C. 2002. pers. comm. to TRAFFIC International, Cambridge, UK. MacNicoll, A., 2002. *in litt* to TRAFFIC International, Cambridge, UK. TRAFFIC North America, 2002. pers. comm. to TRAFFIC International, Cambridge, UK.