

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

Sixteenth meeting of the Animals Committee
Shepherdstown (United States of America) 11-15 December 2000

Implementation of Decision 11.103

TRADE IN TIME-SENSITIVE RESEARCH SAMPLES

This document was prepared by a working group consisting of representatives of the Management Authorities of Germany, Switzerland and the United Kingdom on invitation by the Chairman of the Animals Committee. Significant input to this document was also provided by various professional veterinarians in Germany and the United Kingdom.

Background

1. At the 11th meeting of Conference of the Parties (CoP11) (Gigiri, 10-20 April 2000) following the discussions of document Doc. 11.45.1 (*Amendment of Resolution Conf. 9.6 Concerning Diagnostic Samples, Samples for Identification, Research and Taxonomic Purposes and Cell Cultures and Serum for Biomedical Research*) Decision No. 11.103 was adopted, directed both to the Animals Committee (and if necessary for consultation purposes also to the Plants Committee) and to the Standing Committee.
2. During the discussions in Committee II at CoP11, the majority of the delegates concurred that a simplified procedure for the movement of samples taken from CITES species is necessary. However, also a lot of concern was expressed during the discussions that any new system created should not offer opportunities to circumvent the provisions of the Convention. Furthermore, any solution to the existing problems should also take into consideration the desire of many Parties to allow them to control access to their genetic resources in an appropriate manner and in line with the provisions of the Convention on Biological Diversity.
3. However it should be noted that the overall objective of CITES is to protect species threatened by international trade and that this paper focuses on this issue only. For Parties that are concerned about the protection of their genetic or biological resources and about any relaxation of CITES controls, the Convention under its Article XIV still allows for taking stricter domestic measures.
4. With regard to the Decision directed to the Animals Committee, terms of reference were established as guidance for the Committee's work, namely that it should undertake:
 - i) identification of the various types of samples transferred internationally for purposes of research;
 - ii) categorization of purposes for which samples are transferred internationally, in terms of their commercial, non-commercial, and strict conservation elements, e.g. veterinary and diagnostic samples;

- iii) categorization of the recipient institutions and other recipients of such samples; and
 - iv) evaluation of the need for expedited transfer of samples in each of the categories.
5. This document tries to define these areas of concern and provide some solutions on which the Animals Committee should concentrate its discussion at its 16th meeting.

Identification of types of samples

6. Typical samples as well as the purpose for which they are used can be seen from the table below.

TYPE OF SAMPLE	SIZE OF SAMPLE	USE OF SAMPLE
Blood liquid	Drops or up to 5 ml of whole blood in a tube with anticoagulant; sample may deteriorate in 36 hours	For haematology and standard biochemical tests to diagnose disease; taxonomic research; biomedical research
Blood dry (smear)	A drop of blood spread on a microscope slide, usually fixed (with a chemical fixative)	For blood counts and screening for blood parasites
Blood clotted (serum)	Up to 5 ml of blood in a tube with or without a blood clot	For serology and detection of antibodies for evidence of disease; biomedical research
Tissues fixed	Small pieces of tissues (max. 5mm ³) in a fixative	For histology and electron microscopy to detect signs of disease; taxonomic research; biomedical research
Tissues fresh	Small pieces of tissues (max. 5 mm ³), sometimes frozen	For microbiology and toxicology to detect organisms and poisons; taxonomic research; biomedical research
Swabs	Tiny pieces of tissue in a tube on a swab	For growing bacteria, fungi etc. to diagnose disease
Hair, skin, feathers, scales	Small, sometimes tiny pieces of skin surface in a tube with or without a fixative	For detection of parasites and pathogens and other tests including forensic tests
Cell lines	No limitation of sample size	Cell lines are artificial products cultured e.g. from primate kidney cells, being reproduced endlessly under laboratory conditions in large quantities and used extensively in the production of vaccines or other medical products
DNA	Small amounts of blood, hair, feather follicle, muscle and organ tissue (e.g. liver, heart, etc.), purified DNA, etc.	For identification; forensic investigations; taxonomic research; biomedical research

Categorization of purposes for samples transfers

7. The following types of purposes for sample transfers have been identified:
 - for veterinary diagnosis including disease diagnosis, health treatment and health monitoring;
 - for scientific research in the field, in laboratories and in animal collections;
 - for captive breeding;
 - for reintroduction purposes;
 - for movement of problem animals or zoo animals;
 - for forensic purposes including law enforcement, combating of illegal trade, identification of origin of species being unlawfully declared as captive bred, for species identification or professional malpractice;
 - for taxonomic purposes including species identification and research;
 - for biomedical research purposes; and
 - for production of vaccines and other medical products.
8. Some of the above-mentioned transfers might be purely for research or animal welfare reasons, whereas others might occur for purposes which in future could be used for a commercial purpose. This is in particular true with regard to the use of cell lines. The specimens themselves may in many cases not be sold, but could be the basis of a lucrative business in the form of the diagnostic service they assist in providing. It is therefore recommended to focus the discussions on the impact that such trade in legally acquired specimens could have on the conservation of the species concerned and not whether any particular type of transfer is for commercial or non-commercial gain, at least if it concerns specimens listed in Appendix II of the Convention.

Categorization of recipients of samples

9. It is important that all recipients of samples who later will be allowed to participate in a facilitated exchange of samples of CITES-listed species are clearly identified.
10. Individuals or organizations trading or exchanging samples for diagnostic, biomedical, educational or research purposes for the benefit of conservation of species or human medicine could be categorized as follows: private and government veterinary laboratories, universities, museums, law enforcement agencies, forensic laboratories, individual scientists and veterinarians, basic research institutions and pharmaceutical companies.
11. It is important to note that individual scientists, including veterinarians, have to be mentioned above. It is well known that some of the leading scientists and veterinarians practice on their own and are not part of an institution or private company. Research or investigations by some of the above-mentioned professions is part of their work and income. It would not be appropriate to exclude such individuals should a solution be pursued in future to exempt museums and other institutions registered by the CITES Secretariat for the exchange of samples.

Evaluation of need of expedited transfer

12. For many years, at least some of the international trade in samples mentioned in paragraph 2 above has been largely unregulated. The major reason for this is that no facilitated transfer procedure has been established under the Convention, although urgently needed, and that the usual permitting system under CITES is not suitable to solve the problems that have existed already for a long time. Moreover, CITES Management Authorities might not always be easily accessible nor permits readily available.
13. It is highly likely that a better system for rapid transfer of samples would encourage people and institutions involved in such transactions to operate within the new system.
14. In a typical outbreak of a disease a correct diagnosis and a subsequent accurate treatment heavily depends upon the collection of samples from both live and dead animals, and their immediate submission to appropriate laboratories or specialists. In addition some samples deteriorate within a very short period because of their special nature and require to be transferred for analysis very quickly. Moreover, in many cases, the time of taking of samples, and the specific type and the size of sample to be taken are either difficult or impossible to plan in advance.
15. It would be rather difficult to comprehend why no relaxation from the CITES provisions could be achieved for transfers of samples that are taken and shipped for veterinary and conservation purposes, where there is no intention to exploit a species commercially.
16. The following are examples where a rapid transfer of samples is required and yet often impossible to achieve under current CITES provisions. They will help to explain and facilitate the evaluation of the current unsatisfactory procedures under CITES.
 - The rapid transfer of samples for diagnosis of diseases in endangered animals provides for appropriate disease control and health treatment.
 - The rapid transfer of samples encourages better health monitoring of endangered animals. This is required for good health and conservation management and is also part of the IUCN Reintroduction Guidelines.
 - The rapid transfer of samples can reduce pain and suffering of animals of listed species which could occur if there were delays in processing CITES permits for diagnostic samples. Disease and injury often arise spontaneously and planning far in advance of processing CITES permits is not possible.
 - The rapid transfer of samples can reduce deterioration of samples which would be unethical and detrimental if such material of endangered species were wasted.
 - The rapid transfer of different types of samples can assist CITES law enforcement agencies to take prompt action when infractions are detected through analyses of samples of DNA to establish the origin of a species or its taxonomic status. Other types of samples are also used for law enforcement.
 - The rapid and unbureaucratic transfer of samples would be a significant incentive for the establishment of *in situ* or *ex situ* reference collections for forensic and research purposes.

Issues to be considered by the Animals Committee

17. In addition to the mandate given in Decision No. 11.103 to the Animals Committee, it is recommended that it should also address in its report to be prepared for submission to the Standing Committee the following additional issues:
 - Define the scope (persons and kind of samples) for which exemptions from the CITES provisions and/or expedited and facilitated transfer procedures should be sought.

- Address the problem of samples from Appendices-I and -II specimens in the light of their potential commercial use and assess whether different procedural approaches are required in particular if it concerns commercial shipments of wild collected samples from Appendix-I species.
- Discuss and decide whether size limits should be established for samples in order to avoid potential abuse by any laboratory or research facility. As a starting point for discussion, the limits to be set could be a maximum of 5 ml for body fluids and 5 mm³ for tissue. For hairs and feathers a sample size of 20-30 hairs and three feathers appears reasonable.

Comments from the Secretariat

18. As indicated in document Doc. 11.45.1, the Secretariat would support an amendment of Resolution Conf. 9.6 concerning the application of the term 'readily recognizable' to diagnostic and research specimens. The text of the Convention does not provide for any alternative solution to the range of problems described above, or the exemption of any specimen or type of transaction except as outlined in Article VII paragraph 7. The Secretariat therefore recommends that instead of trying to explore ways of establishing exemptions from CITES for certain types of specimens, the Committee should concentrate on exploring ways of streamlining the time-consuming procedures followed by Parties to issue the required documentation for international transfer of these specimens.