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

Fifteenth meeting of the Conference of the Parties
Doha (Qatar), 13-25 March 2010

Interpretation and implementation of the Convention

Trade control and marking

USING THE TAXONOMIC SERIAL NUMBER (TSN) IN INTERNATIONAL WILDLIFE TRADE DATA: A ROLE FOR CITES

1. This document was submitted by Canada[1].

Background

2. The concept of including Taxonomic Serial Numbers (TSNs) in international wildlife trade data and documentation has been presented several times in CITES discussions (e.g. SC54 Doc. 43.5, AC23 inf. 2, PC 17 Inf. 9).

3. A TSN is a permanent and unique numeric code assigned to an individual taxonomic name.

4. TSNs are assigned by the Integrated Taxonomic Information System (ITIS), a partnership of United States, Canadian and Mexican federal agencies, and of taxonomists and non-governmental organizations sharing a common interest in standardizing the classification and nomenclature of species. ITIS is associated with international biodiversity data systems including Species 2000 and the Catalogue of Life. [2]

5. TSNs always remain with the taxon name to which they are assigned. Should changes in the taxonomy or nomenclature of a taxon occur, the TSN serves to link the new name to the old, allowing continuous tracking of superseded and synonymous scientific names.

6. TSNs can be assigned at all taxonomic levels. The ITIS data system is hierarchically designed; taxa are oriented relative to other levels and members within a taxonomic group.

7. TSNs are normally incorporated into digital data systems but can be included in paper-based systems.

8. ITIS has acquired resources to ensure that all CITES-listed species are assigned TSNs and are included in the ITIS database.

9. At the May, 2006 International Tropical Timber Organization (ITTO) Expert Meeting on the Effective Implementation and Inclusion of Ramin in Appendix II of CITES, a Canadian representative proposed that Customs authorities consider adopting the TSN as a required data element for wildlife commodities in trade (SC54 Doc. 43.5) as a means of addressing problems arising from ambiguous naming of timber species in trade.

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[1] *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.*

[2] Retrieved August 6, 2009 from the Integrated Taxonomic Information System (ITIS) (http://www.itis.gov).

10. Subsequently, Canada introduced the TSN concept in an information document at the 2008 CITES Plants and Animals Committee meetings (AC23 inf. 2 and PC 17 Inf. 9).

11. The concept has been discussed in a series of three scholarly papers appearing in the journal *Conservation Biology* in 2008, where it was argued that TSNs could be used together with the World Customs Organization (WCO) Harmonized System (HS) codes in order to more clearly indicate species in trade and to facilitate customs border screening, data collection and storage, and generation of statistics.[3,4,5]

12. Canada will be using the TSN as a data element for fish import notification to the Canadian Food Inspection Agency, to report species on catch certificates issued by Fisheries and Oceans Canada for exports of fish and fish products from Canada to the European Union, and in the single-window reporting initiative of the Canada Border Services Agency.

13. The Canadian CITES administration will integrate the TSN into its database system, in order to foster better data sharing with its partners in customs and enforcement.

Application to CITES

14. Accurate wildlife trade data are essential to the tracking and monitoring of international wildlife trade and to enforcement of international wildlife trade legislation. The wildlife trade data collected by CITES parties and managed on behalf of CITES by the UNEP World Conservation Monitoring Centre are utilized by CITES Parties, by organizations such as TRAFFIC and by other researchers for analyzing international wildlife trade. National and international customs and trade organizations also collect trade data, including wildlife trade data. These data may or may not include CITES species.

15. Opportunities to collect accurate trade data would be enhanced if all sources reported in a consistent fashion. As well, opportunities to link CITES data sets to other data sets could increase if species were represented in a consistent fashion across data sources.

16. Efforts are currently underway to harmonize wildlife-trade related data systems, to develop single-window reporting systems, and to increase synergy and cooperation among biodiversity-related Conventions and relevant agencies (e.g.):

    a. CITES initiatives on cooperation among biodiversity-related Conventions and other relevant agencies (Doc. 11.12.3, Resolution 10.4 Rev CoP14, SC58 Doc. 12 and Resolution 14.4 to give a few examples),
    b. Decision 14.18 on the harmonization of nomenclature and taxonomy with other Multilateral Environmental Agreements,

    c. CITES World number 18, July 2009 on electronic permitting and other systems,

    d. The World Customs Organization (WCO) “single-window environment” initiative.[6]

17. Incorporation by CITES of TSNs as a data element would greatly assist Parties and other organizations seeking to:

    a. employ the TSN in domestic customs or enforcement activities, and

    b. facilitate comparison of CITES and non-CITES data sets that include TSNs.

Recommendation

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[3] Gerson, H. B. Cudmore, N. E. Mandrak, L. D. Coote, K. Farr and G. Baillargeon. 2008. Monitoring international wildlife trade with coded species data. *Conservation Biology* I22:4-7

[4] Fragoso, G. and S. Ferriss. 2008 Monitoring international wildlife trade with coded species data -- a response to Gerson et al. *Conservation Biology* 22: 1648-1650

[5] Gerson, H., B. Cudmore, N. E. Mandrak, L. D. Coote, K. Farr and G. Baillargeon. 2008. Use of the taxonomic serial number (TSN) as a required data element in international wildlife trade: response to Fragoso and Ferris. *Conservation Biology* 22: 1651-1654

[6] Retrieved August 6, 2009 from the World Customs Organization (WCO) (http://www.wcoomd.org/sw.htm)

18. That Canada presents the draft resolution in Annex I for consideration by the Parties.

Considerations

19. This proposal supports ongoing efforts to simplify taxonomy and nomenclature pursued by the CITES Secretariat, UNEP World Conservation Monitoring Centre, Standing Committee Working Group on Information Technology and Electronic Systems, and the Plants and Animals Committees. The current proposal is presented with the intention that the Taxonomic Serial Number may be of assistance to CITES Parties and related agencies in their monitoring and enforcement of international wildlife trade.

20. ITIS is not proposed as a taxonomic authority, but rather as a source of numeric codes to be used together with standard nomenclature as recognized by CITES and its authorities.

21. Within CITES, some work has already been done to establish complementary species coding systems for certain species groups so as to better manage implementation of the Convention. The advantages of employing TSNs are quite similar (e.g.):

    a. crocodilian species (Resolution 11.12),

    b. sharks (AC20 Inf. 3) and

    c. sturgeon and paddlefish (Resolution 12.7).

COMMENTS FROM THE SECRETARIAT

A. In accordance with the advice in paragraph e) of Resolution Conf. 4.6 (Rev. CoP13), the Secretariat believes that a resolution to establish a time-bound working group on this issue does not seem appropriate and suggests that the two operative paragraphs of the recommendation in the proposed resolution in the Annex to this document should be presented as a draft decision.
B. The Secretariat acknowledges the possible benefits of using taxonomic serial numbers as a complement to the scientific names of species or other taxa, particularly when used in connection with electronic permitting and tagging systems. The Secretariat, therefore, supports the establishment by the Conference of the Parties of a working group to investigate the use of a taxonomic serial numbers as permanent and unique numerical codes assigned to individual taxa and to provide recommendations to the Standing Committee at its 61st meeting.

C. Upon review of the recommendations, the Standing Committee shall ask the Secretariat, in collaboration with the working group, to prepare a discussion paper and a draft decision for consideration and adoption at its 62nd meeting and for consideration at the 16th meeting of the Conference of the Parties.

D. The Secretariat is of the opinion that it is premature to consider the use of taxonomic serial numbers in national data systems, including the use of the Integrated Taxonomic Information System (ITIS) and other systems as a source for such codes, until the Working Group reports on the implications and potential benefits of such use.

Draft Resolution

AWARE that in international wildlife trade ambiguous or incorrect naming of species on customs documents and in trade data creates problems for agencies responsible for tracking, monitoring and enforcement;

AWARE that, in order for customs authorities to collect and manage species data, the scientific name must appear as a distinct data element in customs documentation and data, and further, that binomial nomenclature is subject to orthographic and typographic error;

NOTING a proposal to employ concise and unique numeric codes to accompany the scientific names of the species or other taxa in trade and to complement the World Customs Organization (WCO) Harmonized System (HS) codes in customs data and documentation, as a means to alleviate nomenclature-related problems;

FURTHER NOTING the suggestion that the Integrated Taxonomic Information System (ITIS) is a source of such codes, in the form of the Taxonomic Serial Number (TSN);

AWARE that ITIS has the resources to ensure all CITES listed species are incorporated in its database and is committed to doing so;

RECOGNIZING the high value of wildlife trade data gathered by CITES Parties and managed on behalf of CITES by the UNEP World Conservation Monitoring Centre;

RECOGNIZING that CITES Plants and Animals Committees are responsible for proposing taxonomic authorities and nomenclature for the taxa under CITES purview;

RECALLING that Decision 14.18 directs the Secretariat, in cooperation with Plants and Animals Committee nomenclature experts, to consider ways of harmonizing the taxonomy and nomenclature of species while developing agreements or programs with other Multilateral Environmental Agreements;

AWARE that to facilitate implementation of the Convention, special species codes have previously been adopted or proposed for certain taxa (e.g. crocodilian species, Resolution 11.12; sharks, AC20 Inf. 3; and sturgeon and paddlefish, Resolution 12.7), reflecting in purpose and spirit the advantages of adoption of TSNs;

CONFIDENT that inclusion by CITES of the TSN as an additional, complementary data element in its species databases would assist Parties wishing to use TSNs in their own CITES data sets and other agencies wishing to use CITES data in conjunction with data sets already incorporating TSNs;

THE CONFERENCE OF THE PARTIES TO THE CONVENTION

RECOMMENDS that CITES, through the Secretariat or through a Working Group, investigate the value and feasibility of incorporating TSNs as an element of its data sets, to accompany the scientific names of species or other taxa; and

ENCOURAGES CITES Parties to consider the usefulness of incorporating Taxonomic Serial Numbers in their domestic data systems.