

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



Seventieth meeting of the Standing Committee
Rosa Khutor, Sochi (Russian Federation), 1-5 October 2018

Interpretation and implementation matters

General compliance and enforcement

National reports

IMPROVING ACCESS TO ANNUAL REPORT DATA

1. This document has been prepared by the Secretariat.

Background

2. Article VIII, paragraph 7, of the Convention requires each Party to submit to the Secretariat an annual report on its trade under CITES. Article VIII, paragraph 8 stipulates that these reports shall be made available to the public where this is not inconsistent with the law of the Party concerned. The information contained in the annual reports submitted by Parties is made available by the Secretariat through the CITES Trade Database (trade.cites.org) which is maintained by the World Conservation Monitoring Centre of the United Nations Environment Programme (UNEP-WCMC) on behalf of the Secretariat.
3. Parties recognise the potential of this database for advanced and large scale statistical analysis of CITES trade to assess the effectiveness of their wildlife management and trade policies and to enhance the detection of potentially harmful or illicit trade. However, Parties have drawn the attention of the Secretariat to improvements that could be made to the current search function of the CITES Trade Database to support such analyses.
4. The current search function limits the download of data to a set of pre-defined searches. The data returned by the search function is in an aggregated format (comparative tabulation) and does not present the information at the permit level (per-shipment information) as reported by Parties. The search function is currently limited to searches of less than 1 million records, as this is the maximum number of rows that Microsoft Excel can open in a worksheet. As such, its use for large scale data analysis is limited.
5. At the 69th meeting of the Standing Committee (SC69, Geneva, November 2017), the Secretariat proposed in document [SC69 Doc. 28.2](#) to improve the access to the data by providing an option to download the CITES trade database in addition to the existing search function.
6. In the discussion at SC69, Committee Members and Parties noted the increased interest in statistical analysis of CITES trade data and the importance of per-shipment information for improved decisions on sustainability. They welcomed the improved transparency in accessing the CITES trade data by providing a function to download the complete CITES Trade Database. The Standing Committee, however, raised concerns about making the permit numbers public and requested the Secretariat to develop a proposal that takes this concern into account.
7. The Secretariat has worked closely with UNEP-WCMC to explore options to provide a download of the CITES Trade Database with information on a per-shipment basis, while maintaining the confidentiality of the

permit numbers. The proposed approach is summarized in this document; a more detailed description is provided in an information document.

Proposed approach

8. After discussion, the Secretariat and UNEP-WCMC are of the view that the best approach is to replace the permit number in the data output with a unique identification number ('identifier') which is built from a secure, non-reversible cryptographic hash function¹. This identifier will be ten alpha/numeric characters long.
9. The unique identifier prevents the public from knowing the original permit numbers, as this solution excludes any possibility to find the original CITES permit number from the unique identifier. It can however preserve the relationship between exports and re-exports if the Parties have reported corresponding export and re-export numbers.
10. There are two options for the technical implementation of this approach, which are described below. Both options would only include the unique identifiers in the data output and would not include the confidential permit numbers. While both options provide the same information in the data output, they differ in the way the unique identifiers are stored and the download is generated.

Technical options for implementation

Option 1:

11. Under option 1, unique identifiers would be generated for permit numbers at the point of upload of a record into the CITES Trade Database. This option would mean that the creation and storage of unique identifiers would be fully integrated into the CITES Trade Database. The unique identifiers would be searchable in the internal database, which could expedite the Secretariat's responses to Party queries regarding a specific trade transaction. It would also facilitate the generation of frequent database downloads for subsets of data with the corresponding unique ID as these IDs are already stored in the database. The implementation of this option requires changes to the internal management structure of the CITES Trade Database with an estimated budget of USD 15,000.

Option 2:

12. The second option is to generate the unique identifier by executing a script during the generation of the download. As this procedure requires the script to be run every time the download is generated, it is suggested that a download is generated only once a year. For the first output this could be implemented in 2018 following a decision by the Standing Committee, with outputs generated annually at a pre-determined time in subsequent years. Subsequent outputs would always apply the same unique identifier to the same original permit each time the scripts are run, thereby maintaining continuity between outputs. This second option would not require changes to the structure of the CITES Trade Database. This option could be carried out under the existing support contract between the CITES Secretariat and UNEP-WCMC with no additional budgetary implications.
13. In evaluating the two options the Secretariat is of the view that the second option would be more suitable, as it can be implemented swiftly and does not require an additional budget, while maintaining the same level of security and confidentiality as the first option. The Secretariat notes that the first option could be implemented at a later time if Parties express an interest in more frequent updates.

Recommendation

14. The Standing Committee is invited to note the present document and that the Secretariat intends to:
 - a) work with the World Conservation Monitoring Centre of the United Nations Environment Programme (UNEP-WCMC) to implement a download of the CITES Trade Database in addition to the existing search function. The download shall include trade data on a per-shipment basis. The download shall

¹ A cryptographic hash function is a mathematical algorithm that maps data of arbitrary size to a bit string of a fixed size (a hash) and is designed to be a one-way function, that is, a function which is infeasible to invert. It is intended to use Secure Hash Algorithm 2, in particular SHA-512 which uses 64-bit words to construct the hash. SHA-512 is specified in document FIPF PUB 180-4, National Institute of Technology (NIST), <http://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.180-4.pdf>

not include the confidential permit numbers which shall instead be replaced by a unique identifier. It shall not be possible to derive the original permit number from the unique identifier.

- b) generate the unique identifiers by a script as described in option 2, contained in paragraph 12 of this document for the technical implementation.
- c) monitor the need for more frequent updates of the download and implement improved technical solutions when deemed necessary, provided the availability of the necessary resources and report back to the Standing Committee as necessary.