CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA
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Seventieth meeting of the Standing Committee
Rosa Khutor, Sochi (Russian Federation), 1-5 October 2018

Interpretation and implementation matters

Trade control and traceability

TRACEABILITY: TECHNICAL STANDARDS

1.   This document has been by Mexico and Switzerland as co-Chairs of the intersessional working group on traceability in relation to agenda item 40.* This document h by the working group on a meeting held during SC70.

Background

2.   At its 17th meeting (CoP17, Johannesburg, 2016), the Conference of the Parties adopted Decisions 17.152 - 17.155 on traceability as follows:

Directed to the Standing Committee

17.152   *The Standing Committee shall, at its 68th meeting, establish a working group on traceability, which will work in collaboration with the Secretariat to:*

   a) *recommend a working definition of 'traceability' to assist Parties in work related to the implementation of traceability systems;*

   b) *encourage Parties that are developing traceability systems to ensure they are complementary, mutually supportive and standardized, as appropriate, and that they are adapted to the unique conditions relating to trade in CITES-listed species;*

   c) *provide general guidance on a mechanism to coordinate and oversee the development of traceability systems using lessons learned from the development of the global CITES permits and certificates system, global information and traceability systems, and other relevant initiatives;*

   d) *subject to the availability of external resources, and as appropriate, develop and make use of umbrella guidelines, and recommend standards, to develop traceability systems for different species that are mutually supportive and that generate standardized data;*

   e) *subject to the availability of external resources, analyse examples that describe CITES supply chains, including but not limited to those using Unified Modelling Language, and identify points*

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* *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.*

throughout the supply chain where specimens should be located, verified, and its application defined, bearing in mind a wide range of production systems and life forms;

f) *take into account the work on e-permitting to ensure links between CITES permits and certificates and traceability identifiers;*

g) *collaborate with United Nations and other relevant organizations that have experience in the development and use of traceability standards and systems; and h) draft a resolution on traceability, as deemed necessary, to be submitted to the Standing Committee, taking into account any relevant conclusions and recommendations of the report resulting from Decision 17.154, as appropriate, for consideration at the 18th meeting of the Conference of the Parties.*

Directed to the Parties

17.153 *Parties are invited to:*

a) *support the working group in its work on traceability;*

b) *inform the working group on the development of projects and on new information related to traceability in response to the Notification issued by the Secretariat under Decision 17.154;*

c) *adhere, as appropriate, to international standards and norms related to traceability systems in the development of these systems;*

d) *use data generated from traceability systems, as appropriate, in activities related to non-detriment findings and monitoring programmes; and*

e) *collaborate in the provision of capacity-building programmes that promote South-South and North-South cooperation in the development of traceability systems.*

Directed to the Secretariat

17.154 *The Secretariat shall issue a Notification, requesting Parties to provide information on the development of projects related to traceability.*

17.155 *Subject to the availability of external funding, the Secretariat shall:*

a) *develop a portal on the CITES website on traceability, to make available:*

i) *recommendations by the working group on a definition of 'traceability', general traceability guidelines, and other relevant information;*

ii) *information on new and ongoing projects, as well as existing systems, on traceability, including lessons learned;*

iii) *information on global organizations working on traceability standards and systems;*

and

iv) *relevant documents, research papers and guidelines on traceability; and*

b) *in collaboration with the Standing Committee working group established under Decision 17.152 and UN/CEFACT, commission a report by a global organization or expert with experience in the development of standards related to traceability, to:*

i) *describe a possible governance model (or models) for use in CITES traceability systems;*

ii) *describe the CITES supply chain using Unified Modelling Language or a similar tool;*

iii) *identify and recommend appropriate information exchange protocols and standards for use in CITES traceability systems;*

    iv)   describe a generic CITES traceability standard for use as a common model; and

    v)   report to the Standing Committee on the conclusions of the report.

3.   This document contributes to Decision 17.152 d) and f) and provides recommendations and guidelines on technical standards that Parties may consider when planning and implementing traceability systems for CITES listed species.

Importance of international standards for traceability

4.   The use of a closed, proprietary standard has significant drawbacks especially for systems that are operated for Government agencies:

    (a) A proprietary standard leads to single vendor solutions which increases costs for system procurement, implementation and operation.

    (b) Once a closed, proprietary standard is implemented, the Government agency is bound to a specific supplier. If that supplier ceases to support the system, closes its business or changes its commercial terms in an unacceptable way, costly transition to another standard and system is required.

    (c) Closed, proprietary standards cannot be scrutinised by the international community; their use exposes government agencies to unknown risks in terms of breaches, backdoors to data etc. The lack of transparency also leads to risk of the standard being inadequate in certain situations.

    (d) A closed, proprietary standard may not be acceptable to all stakeholders, in particular in foreign markets where the owner of the standard is not represented.

5.   On the contrary, open, international standards provide a basis for interoperability of processes and systems across different stakeholders, organizations and countries. These standards are the basis for the electronic data exchange and collaboration in international trade. As these standards open a global market, many companies develop systems that meet these standards and users have a choice of high quality and competitive products and services.

6.   For the above reasons electronic systems for collaboration and information exchange in international trade are typically based on open international standards. The World Trade Organization (WTO) recommends the use of international standards in Article 10, paragraph 3.1 of the Trade Facilitation Agreement (WTO TFA)[1]: "*Members are encouraged to use relevant international standards or parts thereof as a basis for their import, export, or transit formalities and procedures (…)*".

7.   Standards are of particular importance for traceability as very purpose of a traceability system is to exchange information on events that took place in a supply chain between many independent stakeholders, both within the country and sometimes across borders.

For above reasons it is recommended that Parties use open, international standards when developing traceability systems for CITES listed species.

Parties should provide information on standards and specifications that are required for authorized external stakeholders to interface their in-house systems with the traceability system.

Ensuring links between traceability systems for CITES listed species and electronic CITES permits

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[1] *https://www.wto.org/english/docs_e/legal_e/tfa-nov14_e.htm*

8. Per definition a traceability system for CITES listed species provides information on specimens and events in a CITES species supply chain. As such a traceability system processes information that is related to the data in electronic CITES permits.

9. Therefore the traceability standard should be compatible with CITES standards for electronic permit processing. This requirement is reflected in CoP 17 Decision 17.152 f) which requests the Working Group on traceability to take into account the work on e-permitting to ensure links between CITES permits and certificates and traceability identifiers

10. The standard for CITES electronic permits is recommended in CoP Resolution Conf. 12.3 (Rev. Cop 17) para. 3 c) which refers to the CITES electronic permitting toolkit2. The CITES toolkit is based on the UN/CEFACT Core Component Library (CCL)3 which is a large repository of data definitions which covers the requirements of information exchange for international trade, transport, commerce and administration.

Use of UN/CEFACT Traceability of Animals and Fish for CITES traceability

11. To support the use of its standards in traceability systems UN/CEFACT developed the Traceability of Animals and Fish[4] standard. Since its creation the scope of this standard has been expanded and now includes requirements for traceability of agriculture produce in general. UN/CEFACT also has agreed to include requirements for traceability in CITES listed species into this standard. The Secretariat provides liaison to UN/CEFACT and participates in the work of the UN/CEFACT Expert Group that develops this standard.

12. The UN/CEFACT traceability standard fully takes into account requirements of CITES electronic Certificates as well as electronic Phytosanitary certificates based on recommendations[5] of the International Plant Protection Convention (IPPC), Fishery Management Systems using the UN/CEFACT FLUX[6] standard and any other international trade, transport and customs document that use UN/CEFACT CCL message specifications. This ensures that traceability systems build to the UN/CEFACT traceability standard can re-use information from a wide range of documents, permits and certificates used in international trade.

13. The UN/CEFACT traceability standard also enjoys support of solution providers as it is built on a GS1 traceability standard[7] . This standard is related to the GS1 Global Trade Identification Number (GTIN[8]) which can be found as a barcode or RFID[9] identifier on nearly any product traded worldwide. GTIN based equipment and systems which is widely used in the transport and logistics industry can be integrated into UN/CEFACT based traceability systems which significantly reduces implementation costs.

For above reasons it is recommended that Parties that plan, implement or operate traceability systems for CITES listed species

- **apply, were feasible, the UN/CEFACT standard for traceability of animals and fish and the UN/CEFACT Core Component Library in CITES traceability system to ensure compatibility with requires for electronic CITES permits and international trade procedures**

- **work with the CITES Secretariat and UN/CEFACT to ensure that CITES traceability requirements are taken into account in future versions of the UN/CEFACT traceability standard.**

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[2] See https://cites.org/eng/prog/eCITES

[3] The UN/CEFACT CCL is part of the ISO 15000 (ebXML) suite of standards. The CITES toolkit uses the UN/CEFACT eCERT standard which is part of the CCL. eCERT is a general standard for licenses, permits and certificates used in agriculture trade.

[4] https://uncefact.unece.org/display/uncefactpublic/Animal+traceability+data+exchange

[5] IPPC ISPM 12; specifications provided at https://www.ippc.int/en/ephyto/ephyto-technical-information/background-information/

[6] http://www.unece.org/info/media/presscurrent-press-h/trade/2016/uncefact-adopts-the-flux-standard-for-sustainable-fisheries-management/doc.html

[7] GS1 originally developed the Electronic Product Code Information Service (EPCIS) as a GS1 proprietary standard and later made EPCIS it available as an open, international standard under the ISO/IEC 19987.UN/CEFACT traceability standard is an extension of ISO/IEC 19987.

[8] https://www.gs1.org/gtin

[9] Radio-frequency identification

Annex 1: International standards with relation to traceability

This annex provides a synopsis of international standards that were researched in the preparation of this document.

GS1 Electronic Product Code Information System (EPCIS)[10], [11] and ISO/IEC 19987:2015

EPICS was originally developed by GS1 and handed over to ISO which published the standard as ISO/IEC 19987:2015. The standard defines how to encode events describing the "what, where, when and why" required for traceability systems; the standard also describes a method to exchange information and to search for information. EPCIS is a modern, industry-driven standard with a growing support group. Its modular, global structure makes it very interesting as a traceability backbone.

UN/CEFACT standard for traceability of animals and fish. The scope of the standard has been continuously expanded to include other types of agricultural produce including garments. The UN/CEFACT standard expands the EPCIS standard so that a traceability system can exchange information of trade and transport documents that use the UN/CEFACT CCL standard. The Agricultural Domain of UN/CEFACT is currently developing this standard and has accepted to consider traceability for CITES as one of its business cases.

ISO 22005: 2007 Traceability in the feed and food chain[12] specifies the basic requirements for the design and implementation of a feed and food traceability system. It can be applied by an organization operating at any step in the feed and food chain

Global G.A.P[13]is an internationally recognised standard for farm production. Certification covers among other areas food safety and traceability. While there is a requirement, there are no concrete rules what information to record or how to exchange it along a supply chain.

BRC global standards[14] guarantee the standardisation of quality, safety and operational criteria and ensure that manufacturers fulfil their legal obligations and provide protection for the end consumer.

International featured standards (IFS)[15] comprise eight different food and non-food standards, covering the processes along the supply chain. IFS certification shows that the certified company has established processes which are suitable for ensuring food and/or product safety

ISO 12875/7 Traceability of finfish products[16] specifies the information to be recorded in marine-captured finfish supply chains in order to establish the traceability of products originating from captured finfish.

It specifies how traded fishery products are to be identified, and the information to be generated and held on those products by each of the food businesses that physically trade them through the distribution chains

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[10] https://www.gs1.org/epcis/epcis/1-1

[11] https://www.gs1.org/traceability/traceability/1-3-0

[12] https://www.iso.org/standard/36297.html

[13] http://www.globalgap.org/uk_en/for-producers/globalg.a.p./

[14] https://www.brcglobalstandards.com/

[15] https://www.ifs-certification.com/index.php/en/

[16] https://www.iso.org/standard/52085.html