

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

Trade control and traceability

INFORMATION ON PROJECTS RELATED TO TRACEABILITY

1. This document has been submitted by Mexico and Switzerland as co-Chairs of the intersessional working group on traceability in relation to agenda item 40.* This document will be discussed 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 throughout the supply chain where specimens should be located,*

* *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.*

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 summarizes traceability systems having been studied, piloted and/or implemented as reported by the Parties in conjunction with Decision 17.154 and through submissions to SC66, AC28 and CoP17 as well as through Notification to Parties No 20/038 2 b).
4. Table 1 summarizes the case studies made available to the Secretariat, as reported in [SC69 Doc 42](#) and in addition three traceability studies that were undertaken conjointly with the Secretariat on shark products and together with UNCTAD on ornamental and medicinal plants.

Piloted or implemented systems

5. Pilot testing of a global traceability information system for reptile skins

Type: Pilot

Species: *Crocodylus moreletii*, *Caiman fuscus* and *Python reticulatus*

Geographical area: Colombia, Indonesia and Mexico (range countries), Italy (importing country)

Implementation status: Pilot

Keywords: RESP, biometric identifiers, mobile application

References: [CoP17 Doc. 46](#), [SC66 Doc. 34.2](#), AC27 Doc. 19.4, [AC28 Doc. 14.2.2](#)

Sponsor: Mexico

Lead agency: RESP

The traceability system aims to ensure legal, sustainable and reliable supply chains for reptile skins by tracing skins from their origin in the wild or a breeding facility up to the final product with controls along the entire supply and regulatory chains in a biologically feasible and economically viable way. The four main components of a global information system were identified as: the identification carrier, the application device, the tracking system, the information system and the governance structure. RESP began the proof of concept and development phases of the four components. The identification carrier is grounded on a biometric image recognition algorithm that creates a Unique Fingerprint Identification (UFI) based on macroscopic skin appearance identification of wrinkles of the surface of the scales, and the shape and relative center positions of the scales for each individual skin as well as the spaces between scales. The application device and the tracking system have been developed as one component configured within a mobile phone application compatible with both iOS and Android platforms that controls all the required parameters for the acquisition of images or videos. The information management system has been structured to be capable of linking to transport documentation, national databases and the data standard for electronic CITES permits set out in the ePermitting toolkit allowing electronic permitting and cross-border sharing of data and monitoring related to wildlife trade and trafficking.

Key recommendations:

- Take note of the initiative on traceability of reptile skins as a valid example on traceability systems and identification technologies

Regulatory systems

6. Caviar: Traceability systems in the CITES context¹

Type: Resolution

Species: *Acipenseriformes*

Geographical area: No geographic focus

Implementation status: implemented

¹ <https://cites.org/sites/default/files/eng/prog/shark/docs/BodyofInf12.pdf>

Keywords:

References: [SC66 Inf. 12](#), [Conf. 12.7 \(Rev. CoP17\)](#)

Sponsor: -

Lead agency: -

CITES Parties have established a caviar labelling and registration system, to facilitate identification/tracing of source and origin. The labelling system has been evolving since April 2000 to improve the traceability of caviar. The label must contain a standard species code, the source code of the caviar, the ISO two-letter code for the country of origin, the year of harvest, the official registration code of the processing plant and the lot identification number for the caviar. It also recommends that Parties establish a registration system for caviar processing and (re-)packaging plants, including aquaculture operations. The system also includes a caviar trade database and records information relating to exports, re-exports and imports of caviar, helping Parties to monitor the legal origin of caviar in international trade, check export quota compliance, track shipments of caviar and identify any potential illegitimate use of CITES permits.

7. Seafood Import Monitoring Programme (SIMP)

Type: Regulatory system for imports in the United States of America from January 2018 onwards

Species: (Priority species): Abalone, Atlantic Cod, Blue Crab (Atlantic), Dolphinfish (Mahi Mahi), Grouper, King Crab (red), Pacific Cod, Red Snapper, Sea Cucumber, Sharks, *Shrimp, Swordfish and Tunas (Albacore, Bigeye, Skipjack, Yellowfin, and Bluefin).

Geographical area: United States of America (importing country)

Implementation status: to be implemented Jan 2018

Keywords:

References: [SC69 Doc 42](#)

Sponsor: United States

Lead agency: United States

The Seafood Import Monitoring Programme came into effect in the United States in January 2018. The National Marine Fisheries Service (NMFS) published regulations establishing the Seafood Import Monitoring Program (SIMP) on December 9, 2016. A copy of the final rule is available at: <https://www.federalregister.gov/documents/2016/12/09/2016-29324/magnuson-stevens-fishery-conservation-and-management-act-seafood-import-monitoring-program>. The Program establishes, for import of certain seafood products, the reporting and recordkeeping requirements needed to prevent illegal, unreported and unregulated (IUU)-caught and/or misrepresented seafood from entering the U.S. commerce, thereby providing additional protections for our national economy, global seafood security and the sustainability of our shared ocean resources. This is the first phase of implementing a risk based traceability programme – requiring the U.S. importer of record to file an electronic report on the origin of the fish at the time of entry and to maintain records from the point of harvest to the point of entry into the U.S. commerce – on an initial list of imported fish and fish products identified as particularly vulnerable to IUU fishing and/or seafood fraud, including sharks. The mandatory effective date is January 1, 2018. More information can be found [here](#)².

8. Traceability project Viet Nam

Type: Regulatory

Species: Wildlife farming and trading

Geographical area: Viet Nam

Implementation status: regulations implemented since 2012; independent project yet to be carried out

Keywords:

References: [SC69 Doc 42](#)

Sponsor: Vietnam

Lead agency: -

² <http://www.iuufishing.noaa.gov/RecommendationsandActions/RECOMMENDATION1415/FinalRuleTraceability.aspx>

Decree no.01/2012/TT-BNNPTNT dated 4th January 2012 of Ministry of Agriculture and Rural Development regulates the portfolio of legal forest product and inspection on the origin of forest products, in which wildlife farming and trading must retain origin traceability records with any changes occurred such as number of hatched eggs, dead offspring, and individuals surviving to adulthood, etc. The local forest protection officers record those changes. All changes must be recorded in writing and certified by the local forest protection officers throughout the supply chain.

At the moment, Viet Nam has yet to have any independent traceability project. The origin verifications are conducted through the wildlife registration record of the Forest Protection Department for certain species.

Traceability studies

9. Traceability Systems for a sustainable trade in South-East Asian Python Skins

Type: Study and pilot

Species: Python reticulatus ssp, Python bivittatus ssp and Python curtus, P.brongersmai and P. bretensteini

Geographical area: South-East Asia

Implementation status: Study

Keywords: UNECE traceability architecture, tags and RFID

References: [AC29](#), [Doc31.3](#), [AC28](#), [Inf.](#), [33](#), http://unctad.org/en/PublicationsLibrary/ditcted2013d6_en.pdf, [SC66 Inf. 12](#)

Sponsor: Switzerland and UNCTAD

Lead agency: GS1 and UNCTAD

The study analyses traceability systems for Python skin trade to confirm the legal origin of snake skins and the economic feasibility of current technologies to implement such a traceability and marking system. The study recommends the implementation of a two-tier traceability system for the python skin value chain with a first, obligatory tier involving the individual marking of dried skins, and a second, voluntary tier using marking technologies (e.g. RFID³) for batches of tanned skins. In the tanning process, tags need to be removed and therefore re-tagging of (batches of) skins is necessary afterwards. First tier tagging would be overseen by the CITES Management Authority. A regular protocol for facility inspections, reviews of inventory reports and other compliance requirements should be a part of best management practices. The issues and options of setting national quotas should be carefully reviewed to consider ways to more effectively monitor harvest (origins), collect scientific data (skin sizes and gender) and provide more incentives for legal trade and enhanced values for local communities (livelihoods). It was also recommended that an inventory of all python skin stockpiles including preconvention stockpiles be made which also includes marking these skins.

Key recommendations from the [UNCTAD study and pilot](#)

- Improved traceability and diversion of trade to legal sources are essential to support and underscore the credibility of the CITES permitting system
- The CITES Snakes Working Group should serve as a regular forum. Collaboration options with all stakeholders should be explored, because stakeholder engagement is essential
- CITES export permits should be issued by the Management Authority closest to the origin of python skins
- All skins from range states must be marked appropriately. Re-exported skins after the tanning process should be marked (at least on batch level)
- Stockpiles of skins need to be registered and all skins marked appropriately.
- A regular protocol for facility inspections, reviews of inventory reports and other compliance requirements should be a part of best management practices.
- The issues and options of setting national quotas should be carefully reviewed to consider ways to more effectively monitor harvest (origins), collect scientific data (skin sizes and gender) and provide more incentives for legal trade and enhanced values for local communities (livelihoods).
- Available traceability systems need to be tested more.

Key recommendations from [AC29 Doc31.3](#)

³ Radio-frequency identification, a radiowave based mark that does not require direct line of sight

- The CITES community needs to examine the drivers of illegal trade. Range states are encouraged to amend management protocols to mitigate circumvention of any traceability systems that are implemented.
- It is recommended to establish a holistic traceability and authenticity approach focused on batch traceability and a limited number of identification keys and technologies.
- All CITES countries should describe the traceability component systems to have a synthetic view of their policy claim, law enforcement measures and expectations to facilitate collaboration between parties including information exchange.
- The relationship with WCO to design better connections between traceability standards and single window/e-permit approach should be deepened.

10. Traceability study in shark products

Type: Study and pilot

Species: Sharks and rays

Geographical area: No specific area for the study; pilot: Costa Rica

Implementation status: pilot

Keywords: Shark fins and simple shark products, legal origination

References: [SC66 Inf. 11](#), [CoP17 Doc. 56.1](#),

<https://www.dropbox.com/s/4cf26chs2p4jqvr/Catch%20documentation%20and%20traceability%20of%20shark%20products%20in%20Costa%20Rica%20V160329a%20%28no%20details%29.pdf?dl=0>

Sponsor: European Union (study) and Germany (pilot)

Lead agency: Secretariat

This report looks at the market chains of products derived from CITES-listed shark species and the use of traceability to identify the products in trade. For a traceability supported permitting process, the application for a CITES permit or certificate should also include the recording of certificates of origination for an equivalent quantity. Separate commodity codes should be implemented for unprocessed dried, processed dried, unprocessed frozen and processed frozen shark fins in order to continue meaningful trade monitoring. Appropriate taxonomically specific data recording systems for both fisheries and trade concerning species should be developed. Taxonomically specific data should be shared between relevant national systems, and use national plans of action (NPOAs) for the conservation and management of sharks. Traceability should link the export/import permit (such as a CITES permit) or certificate to a suitable legal origination process. This legal origination process should include issuance of a uniquely identified certificate that lists the species and the quantity/mass. Incentives should be designed to convert illegal and unreported landings into legal and reported landings, e.g. by implementing tradable certificates. A neutral intergovernmental body should operate a traceability system centrally and the system should be prepared to run in a distributed fashion. The paper recommends implementation a larger scale pilot involving at least also one developing country.

Key recommendations from the study:

- Traceability is a tool that can help avoid the entry of illegal, unregulated and unreported material into legal supply chains. It helps little for fully illegal trade.
- Traceability and in particular linking trade data to the origin of the raw materials can be used by Parties in the process of making more robust Non-Detriment and Legal Acquisition Findings.
- Traceability should link permits and certificates to a suitable legal origination process. This legal origination process must include a uniquely identified record listing species and quantity/mass.
- It is highly recommended that such certificates of origination are recorded electronically as early as possible; they can, however, also be recorded in the export permit issuance process.
- An attempt should be made not to place undue burden on food business operators that would discourage their buy-in.
- It is highly recommended to link the traceability system with a risk management system.

Key recommendations from the pilot

- In order to strengthen CITES permit processes an online system for consultation of relevant certificates and permits is recommended.
- An impact study of artisanal fisheries is suggested to understand the need to include this fishery in the established traceability system
- Stakeholder involvement through e.g. a traceability round table is key to success.
- A user-friendly, mobile fishery inspector data capture tool and the corresponding management database should be considered. Availability of mobile tools should be extended to the artisanal

fleet and its use incentivized for example by linking fuel subsidies to making data available. Such data could then be spot-checked by inspectors.

11. Ornamental Plants: The applicability of traceability systems for CITES ornamental plants with a focus on the Andean and other Latin American countries – A Preliminary Assessment

Type: Study

Species: Cycadaceae, Orchidaceae, Bromeliaceae and Euphorbiaceae

Geographical area: Andean and selected Latin American countries

Implementation status:

Keywords: UNECE traceability architecture, complex value chain

References: [CoP17 Inf. 87](#), [SC66 Inf. 16](#)

Sponsor: UNCTAD

Lead agency: Syntesa

This study analyses the trade of CITES Appendix II- and Appendix III-listed ornamental plants and analyses the use of traceability systems as a tool to strengthen existing CITES permit processes. Comprehensive control systems based on issuance and control of operating licenses and control of exported quantities/specimens via CITES import and export permits and certificates are already operational in the countries where the study took place. Recording of receptions of plant material at nurseries, creation of a database of properly identified parental plants and linking export permits to identified parental plants can strongly strengthen the CITES permitting process, especially if coupled with risk management systems in the controls for an operating license and in the issuance of CITES import and export permits and certificates. A traceability system was recommended based on the process elements, i.e. recording of receptions, recording and control of stocks, linking of CITES export permits and certificates to registered stocks. The socioeconomic impacts arising from the use of such a traceability system should be understood and integrated into a pilot project. A pilot was recommended.

Key recommendations:

- For a successful implementation, Parties must recognize the need to strengthen CITES processes through the use of traceability systems for ornamental plants.
- Technical viability of the proposed system needs to be verified, in particular, regarding identification and record keeping at the nurseries, including small-scale nurseries.
- The right mix of positive and negative incentives for the private industry needs to be found for them to participate.
- Open, international standards and norms should be employed when available, and joint work with standard setting organizations envisioned.
- Provision of capacity-building initiatives for developing countries and, particularly, least developed countries lacking adequate infrastructure to implement and use traceability systems should be made.
- In order to facilitate correct implementation of a traceability system, creation of a traceability toolkit (or integration into the e-permitting toolkit) is recommended.
- Feasibility of the recommended processes in regarding technical, economic and conservational aspects must be demonstrated e.g. by conducting a socioeconomic impact analysis.
- A pilot project should be implemented to check the viability of the recommendations.

12. Medicinal Plants: The applicability of traceability systems for CITES-Listed Medicinal Plants (Appendices II & III)-Greater Mekong: Preliminary Assessment

Type: Study

Species: *Aquilaria crassna*, *Gastrodia elata* and *Dendrobium nobile*

Geographical area: Greater Mekong sub region

Implementation status:

Keywords: UNECE traceability architecture, complex value chain

Reference: [CoP17 Inf. 87](#)

Sponsor: UNCTAD

Lead agency: Syntesa

The paper analyses the use of traceability systems as a tool to strengthen existing CITES processes, in particular legal acquisition findings and non-detriment findings (NDFs), for non-timber plant species, particularly medicinal plants, listed under CITES Appendices II and III in the Greater Mekong sub region. It was found that a robust traceability system could be implemented to support CITES policy claims, traceability data collection and allow for better documented NDFs based on the UNECE traceability

architecture. The proposed traceability system aims to balance the need to control the legality of the raw material source and the practicalities of businesses. The study finds that a traceability system for medicinal plants would be quite complex and needs to be embedded in a more general framework of activities, such as improving trade data collection, capacity building and awareness creation of stakeholders and information dissemination, especially to smaller players, on market prices and other relevant data. The report recommends stricter control on the early stages of the value chain where risk of introduction of illegally harvested material is greatest. To ensure that all stakeholders in the medicinal plant supply chain see direct benefit and advantage of participation, consideration should be given to the formation of partnerships with sustainability schemes providing economic incentives to stakeholders. The report recommends that a partner be found to run a pilot project ideally embedded in a project already looking at sustainable trade with biological resources, e.g. within the framework of BioTrade.

Key recommendations:

- For a successful implementation, Parties must recognize the need to strengthen CITES processes through the use of traceability systems for medicinal plants and products thereof.
- Formation of partnerships with sustainability schemes should be considered to provide the right mix of positive and negative incentives for the private industry.
- Provision of capacity-building initiatives for developing countries and, particularly, least developed countries lacking adequate infrastructure to implement and use traceability systems should be made.
- Improving the cross-border reporting of exports and imports to ensure a better understanding of the traded volumes of medicinal species for effectively managing the reporting of endangered medicinal plant resources.
- Identification procedures for wild collected or artificially propagated plant species should be improved.
- Open, international standards and norms should be employed when available, and joint work with standard setting organizations envisioned.
- In order to facilitate correct implementation of a traceability system, creation of a traceability toolkit (or integration into the e-permitting toolkit) is recommended.
- Feasibility of the recommended processes in regarding technical, economic and conservational aspects must be demonstrated e.g. by conducting a socioeconomic impact analysis.
- A pilot project should be implemented to check the viability of the recommendations.

Table 1 Summary of traceability studies made available by Parties or other organizations in response to Decision 17.154.

Publication	Sponsor Lead agency	Applicable area	Methodology	Implementation method	Status
Pilot testing of a global traceability information system for reptile skins	Mexico RESP	Reptile Skins	Biometric image recognition Unique Fingerprint Identification (UFI) International identification information standards	Identification carrier Application device Tracking system Information system Governance structure Information management system	Proof of concept in progress and development phases of the four components
Traceability systems in the CITES context A review of experiences, best practices and lessons learned for the traceability of commodities of CITES-listed shark species	- -	Caviar	Labelling and registration system to facilitate identification/tracing of source and origin Globally standardized serial identification numbers Accurate, up to date and detailed book-keeping systems	Caviar trade database Universal labelling system Standard species code Source code of the caviar ISO two-letter code for the country of origin Year of harvest Official registration code of the processing plant Lot identification number for the caviar	Implemented Evolving process with further improvements to the traceability system
Seafood Import Monitoring Programme (SIMP)	United States of America/ United States of America	Seafood; particularly certain species	Electronic report on the origin of the fish	Regulatory	Obligatory from Jan 2018
Traceability project Viet Nam	Viet Nam -	Wildlife farming and trading	Record keeping with any changes	Regulatory	Since Jan 2012
Traceability Systems for a sustainable trade in South-East Asian Python Skins	Switzerland/UNCTAD GS1/UNCTAD	Python Skins	Two-level marking Inventory & tagging of all python skin stockpiles	Tagging & RFID technology Inventory of stockpiles	Pilot successful Continued investigation recommended

				Capacity building	
Traceability study in shark products	European Union/Germany CITES Secretariat	Shark products	Risk management CITES permitting process with certificates of origination.	Distributed system: Mass balance Engagement with small holders Standardization GS1 standards Good governance	Recommend: pilot project involving at least one developing country
The applicability of traceability systems for CITES ornamental plants with a focus on the Andean and other Latin American countries – A Preliminary Assessment	UNCTAD Syntesa	Ornamental plants	Risk management Cost and benefits analysis Record keeping of receptions, recording and control of stocks, linking of CITES export permits and certificates to registered stocks	Public and private sector partnerships Pilot project based on understanding possible socioeconomic impacts	Study
Applicability of Traceability Systems for CITES-Listed Medicinal Plants (Appendices II & III) – Greater Mekong: Preliminary Assessment	UNCTAD Syntesa	Medicinal plants	UN/CEFACT traceability framework Capacity Building Mass Balance and/ or chain of custody Certification and benefit sharing schemes Cost and benefits analysis Three-layer approach Conduits of excellence	Public and private sector partnerships Building partnerships with others (e.g. BIOTRADE, FairWild etc) Tagging Mass balance Awareness creation for stakeholders	Study