

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



Sixty-ninth meeting of the Standing Committee
Geneva (Switzerland), 27 November -1 December 2017

Interpretation and implementation matters

Trade control and traceability

ELECTRONIC SYSTEMS AND INFORMATION TECHNOLOGIES

1. This document has been submitted by Switzerland, as the Standing Committee lead for electronic systems and information technology.¹

Background

2. At its 17th meeting (Johannesburg, 2016), the Conference of the Parties adopted Decisions 17.156-17.159 on *Electronic systems and information technologies*:

Directed to the Parties

17.156 *Parties are encouraged to submit to the Secretariat information regarding their planned and ongoing projects related to the use of electronic systems and information technologies in improving the management of CITES trade, and regarding the lessons learned.*

Directed to the Standing Committee

17.157 *The Standing Committee shall re-establish the Working Group on Electronic Systems and Information Technologies to work in collaboration with the CITES Secretariat to undertake the following tasks:*

- a) *to further collaborate with the United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC) their development of the Electronic Permit Information eXchange (EPIX) system as a conduit for the exchange of CITES permits and certificates, and as a central registry to facilitate validation of CITES permit data by CITES Management Authorities and Customs officials;*
- b) *identify where the progress in the EPIX system, and the subsequent facilitation of the reporting requirements of Parties, may potentially affect the provisions of Resolution Conf. 11.17 (Rev. CoP17) on National reports and the amendment of Guidelines for the preparation and submission of CITES annual reports distributed by the Secretariat.*
- c) *to work the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), the United Nations Conference on Trade and Development (UNCTAD), the International Trade Centre (ITC), the World Bank, the World Customs Organization (WCO), and the World Trade Organization (WTO) in the context of the Agreement on*

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.*

Trade Facilitation, and other relevant partners, to continue the development of joint projects that would facilitate Parties' access to electronic permitting services and their alignment to international trade standards and norms, such as the revision of the CITES e-permitting toolkit and the development of the eCITES module in ASYCUDA;

- d) *to work with the Secretariat of the International Plant Protection Convention (IPPC) in the development of electronic trade documentation and learn from IPPC's efforts to develop electronic phytosanitary certificates; and*
- e) *to monitor and advise on Parties' work related to the development of traceability systems for specimens of CITES-listed species to facilitate their harmonization with CITES permits and certificates.*

17.158 *The Standing Committee shall:*

- a) *review the progress of implementation of Decision 17.157 and make recommendations as necessary, including any suggestions for the revision of Resolution Conf. 11.17 (Rev. CoP17) and the amendment of Guidelines for the preparation and submission of CITES annual reports distributed by the Secretariat, to the 18th meeting of the Conference of the Parties; and*
- b) *review the information submitted by Parties under Decision 17.156, as well as the progress of implementation of Decision 17.157 and make recommendations as necessary, any suggestions for the revision of Resolution Conf. 12.3 (Rev. CoP17) on Permits and certificates to ensure the Resolution allows for electronic border clearance processes that are consistent with and incorporate the requirements of Articles III, IV, V and VI into any e-permitting system, examining in particular the issues of presentation and validation, to the 18th meeting of the Conference of the Parties.*

Directed to the Secretariat

17.159 *The Secretariat shall, subject to the availability of external funding:*

- a) *publish on the CITES website the results of planned and ongoing projects undertaken by Parties related to the use of electronic systems and information technologies in improving the management of CITES trade, and the lessons learned, as submitted by Parties;*
- b) *communicate with national lead ministries responsible for the development of Single Window environments, to raise awareness of CITES and to ascertain the availability of financial support to assist CITES Management Authorities to develop CITES e-permitting systems; and*
- c) *provide capacity-building and advisory services to support Parties interested in implementing electronic solutions for the management of CITES permits and certificates.*

Questionnaire on planned and ongoing projects for electronic CITES systems (Decision 17.156)

- 3. To assist the Parties in the implementation of Decision 17.156, the Secretariat issued Notification 2017/041 inviting Parties to participate in the *Questionnaire on electronic systems and information technologies for CITES management (eCITES)*. The questionnaire was conducted as an online survey.
- 4. For the evaluation the responses were grouped into responses from Management Authorities that are from high-income countries² and responses from Management Authorities that are from other countries. Of the 36 responding Parties 18 were from high-income countries and 18 from other countries.
- 5. 53 per cent of the Management Authorities from high-income countries and 39 per cent of the Management Authorities from other countries felt that their CITES system supports all relevant steps of the permit process. In high-income countries 79 per cent of the CITES systems can print the CITES permits, while in the other countries group 50 per cent of the systems can print permits. 79 per cent of the respondents from high-

² As defined by UNCTAD Statistical office, *Economic Groups*, <http://unctadstat.unctad.org/EN/Classifications.html>

income countries use their electronic CITES system for automated generation of the annual trade report. 58 per cent of respondents from other countries reported that their system generates the annual report.

6. 74 per cent of respondents from high-income countries and 64 per cent of respondents from other countries reported that electronic information is not accessible to customs. 68 per cent of the Management Authorities from high-income countries and 79 per cent from the other countries reported that they do not receive electronic information on actual quantities exported.
7. There was a consensus of respondents both from high-income and other countries that an electronic CITES system is important for proper management and control of the CITES permit process and that such a system increases transparency and reduces incidents of corruption. Respondents from both groups were of the opinion that electronic information exchange between the CITES system and customs can reduce illegal trade in wildlife.
8. 95 per cent of the respondents from the other countries group expressed high or very high need for capacity building and exchange of experience and all respondents from this group indicated that further advancements in the implementation of electronic systems would require support of donor agencies. Respondents from high-income countries were less interested in capacity building and a majority did not require support from donor agencies.
9. A detailed analysis of the responses to the questionnaire is provided in an information document and will be made available on the dedicated page of the CITES website, in line with Decision 17.159 a) (see para 10. below).

CITES Website on Information relating to the use of electronic systems and information technologies [Decision 17.159 a)]

10. The Secretariat has improved the CITES website for Electronic Systems and Information Technologies (see www.cites.org/eng/prog/eCITES). The website provides information on the survey and the instruments available to Parties. The working programme and outputs of the Working Group will be made available through a dedicated page on this website (see para 11. below).

Draft programme for the Working Group on Electronic Systems and Information Technologies (Decision 17.157)

11. Based on the mandates given to the to the Standing Committee in Decisions 17.157 Switzerland prepared a draft work programme for the Working Group on Electronic Systems and Information Technologies. This work programme takes into account that electronic solutions for CITES automation are now accessible to all Parties and progress is made in finding approaches for electronic exchange of permit information among Parties.
12. The draft work programme, provided in the Annex of this document, will be reviewed by the members of the Working Group on Electronic Systems and Information Technologies once the Group is fully established.

ASYCUDA eCITES software for automation of CITES business processes [Decision 17.157 c)]

13. In collaboration with the Secretariat UNCTAD completed the development of ASYCUDA eCITES, as an off-the-shelf software solution for CITES Management Authorities for electronic certification, control and reporting of trade in CITES listed species. The system can be configured to the specific requirements of a Party including adaptation to national legislation and procedures and the official national languages.
14. ASYCUDA eCITES supports full automation of the CITES permit processes, including online registration of permit requests by traders, control of the permit workflow, approval and issuance of permits, automated generation of annual report information, exchange of permit information with Customs authorities for export and import control and electronic payment of fees.
15. ASYCUDA eCITES is now completed and is available to Parties for implementation since late 2016. UNCTAD provides the system in the framework of a technical cooperation project which includes capacity building and implementation support to the CITES Management Authority, development of national adaptations and initial operations support. The software itself is provided free of charge and in source code.

16. For the operation of the system two models are available. The system can be maintained in and by the implementing country. Alternatively the country can ask UNCTAD to host and maintain the system in UNCTAD's Centre of Excellence in Gibraltar.
17. For a small to medium sized country the system can be implemented for approximately USD 150,000. Significant savings can be realized if several countries join in a regional implementation project. Parties interested to implementing ASYCUDA eCITES are invited to contact the Secretariat for further information.

Framework for the implementation of electronic CITES systems

18. As part of implementing Decision 17.159 c) the Secretariat developed Framework for the implementation of electronic CITES systems³ which can be used by Management Authorities to plan and control implementation projects. This Framework takes into account experiences from Parties that have already implemented electronic CITES systems. The Secretariat intends to update the Framework as more implementation experience becomes available.
19. The Framework recommends Parties to implement CITES systems in a stepwise approach focusing on four major areas:
 - Automation of the CITES permit issuance process in the Management Authorities, including electronic application of CITES permits; transparent and automated controls during inspection, approval and issuance of all permits; electronic payment of fees and electronic repository of all valid permits
 - Electronic information exchange of CITES permits with customs authorities, automated risk assessment and targeted inspections for export, import and transit and coordinated border controls
 - Automated generation of annual trade reports and other reports to monitor legality and sustainability of trade
 - Electronic exchange of CITES permit information between Government authorities of export, import and transit countries to prevent use of forged documents and establish end-to-end control of trade
20. Each implementation step can be considered as a project in itself, with defined deliverables, Key Performance Indicators and benefits for the stakeholders. The stepwise approach allows Parties to adapt project implementation to the availability of funding and their own readiness to change to new working procedures.
21. A policy brief⁴ on electronic CITES solutions is provided in Annex II of this document.

Interest of Parties to implement electronic CITES systems [Decision 17.159 b0 and c)]

22. The electronic CITES solutions were presented to Parties on a side event organised by Switzerland during the 17th meeting of the Conference of the Parties (Johannesburg, 26 September 2016). The ASYCUDA eCITES system was presented on the occasion of the Oceania and Pacific regional joint meeting for the 17th Meeting of the Conference of the Parties⁵ (Samoa, Apia, 15-19th August 2016) and during a side event of the Second Caribbean Wildlife Enforcement Network (Bridgetown, Barbados, 11 May 2017). The Secretariat gave a Webinar on Implementing electronic CITES Permits to the Global Wildlife Programme Virtual Knowledge Exchange⁶ on 4 May 2017. The Secretariat also provided direct advisory services on different aspects of adopting electronic solutions on specific request of individual Parties.
23. The Secretariat received strong interest from many Parties for assistance to implement the ASYCUDA eCITES solution in their administration. Requests came in particular from developing countries from the Caribbean and the Oceania and Pacific region as well as countries from Sub-Saharan Africa, Latin America and the Caucasus.

³ *eCITES Implementation Framework; document available from the Secretariat*

⁴ *Automation of CITES permit procedures and electronic information exchange for improved control of international trade in endangered species (eCITES)*

⁵ <https://cites.org/sites/default/files/document/Pacific%20preCoP%20meeting%20program%2003082016.pdf>

⁶ <https://cites.org/sites/default/files/common/prog/e/GWP-Virtual-Knowledge-Exchange-Implementing-eCITES-permits-May-4-v4.pdf>

24. All Management Authorities from developing countries that contacted the Secretariat emphasised their need for external funding to implement an electronic system. The Secretariat has no budget to support Parties in the implementation of automated solutions. The lack of external funding is now the main obstacle for wide spread adoption of automated CITES solutions. The Management Authorities asked the Secretariat to draw the attention of donor agencies to the importance of electronic CITES solutions for improved control of CITES permits and their need for external funding.

Pilot project on electronic permit information exchange (EPIX) [Decision 17.157 a), b), c) and d)]

25. Switzerland, France and UNEP-WCMC conducted a joint feasibility study on the exchange of electronic permits between CITES Management Authorities. The study evaluated the exchange of permits using a central hub which would act as a clearing house. UNEP-WCMC developed an initial technical prototype for such an exchange hub.
26. The feasibility study helped to identify a series of non-technical preconditions that Government agencies are likely to request before they would agree to exchange permits through a central hub. This included inter alia service level agreements for the governance and the operation of the hub, standards on data confidentiality, security and retention as well as agreements for the funding of the hub service provider and subscription of services. In evaluating the outcome of the feasibility study Switzerland and France [Participants] felt that the development of these standards and agreements would be a very demanding undertaking.
27. In taking the pilot project forward Switzerland and France resolved to develop electronic permit information exchange as direct (Party to Party) exchange of electronic Permits between the Management Authorities. The development of the direct information exchange solution has made very good progress and both Parties expect to conclude testing for operational permit exchange between the two management Authorities by the end of 2017.
28. After completion of the pilot Switzerland and France will share outcomes and lessons learned with the Working Group on electronic Systems and Information Technologies in view of developing standards and recommendations for wide scale adoption of electronic permit exchange.
29. The Secretariat provided strategic support to the pilot by acting as observer in the project. In implementing Decision 17.157 d) the Secretariat provides liaison and exchange of lessons learned with the ePhyto project⁷ for the electronic exchange of phytosanitary certificates conducted jointly by the International Plant Protection Convention (IPPC) and the World Trade Organization. The Secretariat attends the ePhyto Project Advisory Committee and participated in meetings and workshops for the implementation of electronic Phyto certificates.
30. In compliance with Decision 17.157 c) the Secretariat also participates in the meetings of the expert group on agriculture trade of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). The Secretariat gave a presentation on electronic permit information exchange on a workshop organised at the 29th UN/CEFACT Forum (Geneva, Switzerland 27 - 31 March 2017).
31. Switzerland also notes the emergence of Blockchain⁸ technology which may provide in the future solutions for secure and trusted exchange of electronic CITES permits between Parties. The Secretariat has drafted the *CITES Blockchain Challenge* to encourage academia and private sector companies to research in the potential of this new technology for the benefit of CITES Parties.

Conclusion

32. Substantive progress has been made towards the automation of CITES processes. With the ASYCUDA eCITES system a low-cost, off-the-shelf solution for the automation of CITES processes is now available to Parties. The Framework for the implementation of electronic CITES systems helps Management Authorities to develop a tailored, national implementation strategy. The implementation of electronic CITES systems is a precondition for widespread uptake of electronic permit information exchange.
33. In the survey on electronic systems and information technologies the participating Management Authorities emphasised the importance of electronic systems for improved control of CITES permit processes and to

⁷ <http://ephyto.ippc.int/>

⁸ <https://en.wikipedia.org/wiki/Blockchain>

reduce incidents of illegal trade in wildlife. The Management Authorities are committed to implement and further enhance electronic CITES systems in their agencies. Management Authorities from developing countries reported that support from donor agencies is required to progress implementation.

34. The Secretariat provides advisory services to Parties interested in adopting automated solutions. Parties expressed their interest to implement ASYCUDA eCITES but further progress was not made due to lack of funding.

Recommendation

35. The Standing Committee may wish to:

- a) re-establish the Working Group on Electronic Systems and Information Technologies
- b) consider the suggested work plan provided in the annex to this document
- c) take note of the availability of a low cost software solution for the automation of CITES processes
- d) call upon interested Parties to evaluate whether an implementation of this system in their Management Authority can strengthen CITES permit control
- e) call upon donor agencies to take note of the interest of many Management Authorities from developing countries to adopt automated solutions and the need to provide funding for the implementation

Draft work programme of the CITES Working Group on Electronic Systems and Information Technologies

State: Draft
Version: 20170118

I. Automation of CITES processes (eCITES)

- Can we establish a reference model to describe a stepwise implementation of automated CITES permitting?
 - What do Parties need to automate CITES processes, in particular in (L)DCs?
 - Can standard software solutions and Single Window provide solutions for eCITES?
 - How can we share experiences and lessons learned between parties?
- ***The WG will have to discuss these questions and decide whether a reference Model that helps parties to implement such an automation should be developed. It will also have to decide whether this would be a standalone document besides the more technical document of the Toolkit.***

II. Electronic Exchange of Permit Information between Parties (EPIX)

EPIX overall concept

- What do we understand under EPIX (definition), what are the benefits to Parties (objectives) and preconditions for exchange between Parties?
 - What are the different concepts (architecture) for the information exchange that Parties can implement (point to point, HUB, hybrid solutions) and how to evaluate them?
 - What standards and recommendations should Parties use when exchanging permits?
 - Can we recommend Parties to follow a specific concept?
- ***Based on the results of the questionnaire sent out by WCMC, the WG will have to comment and make recommendations to these questions to the SC***

Governance issues in relation to implementing EPIX with a Hub concept

- What are the responsibilities of the Parties/the Hub provider
 - Costs and Financing of the Hub
 - Who is owner of the Hub
 - Who manages the Hub, including support services to parties in case of problems
 - Who is responsible in case of system failures
- ***The WG will have to discuss these issues and make recommendations to the SC***

EPIX standards (architecture independent) based on the specifications and experiences currently developed in the pilot project between Switzerland and France

- Development/review/approval of managerial message exchange standards: minimum requirements on quality of permit data and national eCITES systems, archiving and availability of data, fair use of information,
- Development/review/approval of technical message exchange standards: protocols, message calls, message envelope and status codes.
- Security and authentication requirements.

- ***The results and documentation of the pilot will have to be discussed by the WG and the WG will have to submit its views to the SC whether they can be recommended for inclusion into the Toolkit as standards for the data exchange between parties.***

III. “Electronic signatures” in CITES permits

- What are the requirements for an electronic signature in exchanging e-permits between parties?
- Which international standards exist in this regard?
- Are these international standards acceptable to all Parties?
- ***The WG will get an analysis by the Secretariat on this issue and will have to comment on it and make appropriate recommendations to the SC***

IV. Advancement of annual reporting

Improvements to the existing reporting and publication system

- For annual reporting using Data Exchange, the system should use exactly the same data structure as the ePermitting XML Schema defined in the Toolkit using a limited set of data fields.
- The Secretariat will prepare such a version of the XML data structure for inclusion into the toolkit.
- ***The WG will have to discuss this way forward and make appropriate recommendation to the SC***

Sharing of reporting information to prevent fraud in CITES permits (Clearview)

- Can we make better use annual reporting information to fight against illegal trade in wildlife?
- Does the Clearview project respond to needs of parties? Clearview aims to use the Data Exchange framework to allow parties to query permit confirmation between the relevant entities (customs, CITES MA's)
- Should queries be shared through a central Hub or through a network?
- ***Based on a project proposal, the WG should discuss the questions above and make recommendations to the SC***

Options for the simplification of annual reports in the future

- What are the objectives of the annual reports and how can information technology contribute to these objectives.
- Which technical solutions would we like become available to Parties?
- How will automation of CITES permits improve annual reporting of Parties?
- How do parties see the role of EPIX in relation to annual reporting?
- ***Based on the results of the WCMC questionnaire, the WG should discuss these issues and make appropriate recommendation to SC.***

V. Connections to the Traceability WG and its consequences for Resolution 12.3 (Rev. CoP17)

- According to the outcomes of the WG on traceability, what changes may have to be made to Resolution 12.3 (Rev. CoP17) or the Toolkit

- **The WG will have to follow on the work of the SC WG on traceability and make the appropriate recommendations.**

VI. Analysis of the import and export process under CITES, including the cross border customs clearance procedures if the processes are in electronic format and the consequences for Resolutions 11.17 (Rev. CoP17) and 12.3 (Rev. CoP17)

- How do today's customs clearance procedures and developments match with the current CITES processes.
 - What changes to the Resolutions 11.17 (Rev. CoP17) and 12.3 (Rev. CoP17) would be needed to reflect those developments
- **The WG will receive an analysis done by the Secretariat on that topic and will have to comment on this analysis and make appropriate recommendations to SC**

Relation of the work programme to the mandates given to the ePermitting Working Group in CoP 17 decisions 17.157 and 17.158

17.157 a) Conduct further work on the development of Electronic Permit Information eXchange relates to work programme agenda item I and II

17.157 b) Identify impact of EPIX progress on Conf. 11.17 (Rev. CoP16) and Guidelines for submission of annual reports refers to agenda items II, III and IV of this work programme.

17.157 c) Work with UN/CEFACT and other international organizations for revision of the Toolkit: The Chair of the Working Group and the CITES Secretariat will be in ongoing liaison with UN/CEFACT and relevant organizations and report to the Working Group.

17.157 d) The Secretariat is represented in the IPPC Steering Committee and will report to the Working Group on all relevant issues.

17.157 c) Work with UNCTAD ASYCUDA on the development of the eCITES module: The Secretariat is on ongoing liaison with UNCTAD on the development and implementation of ASYCUDA eCITES and will report to the Working Group.

17.157 e) Advise Parties on work related to traceability and harmonization of traceability with CITES permits refers to agenda item V

17.158 b) electronic border clearance processes are in conformance with Articles II, IV, V and VI refers to agenda item VI

Automation of CITES permit procedures and electronic information exchange for improved control of international trade in endangered species (eCITES)

Policy Brief prepared by the CITES Secretariat

Executive Summary

The automation of CITES processes in the authorities that manage and control trade in wildlife in a country is crucial to protect endangered species and combat illegal trade in wildlife. Automation of CITES processes enforces regulations, increases transparency and reduces opportunities for corruption and the use of fraudulent documents.

Exchange of electronic CITES permits with customs and border control agencies enables automated risk management and coordinated border controls. Electronic information exchange with other countries puts an end to current practices using fraudulent paper permits to launder illegal trade in endangered species in the international supply chain.

CITES-listed species can be particularly vulnerable to illegal trade when CITES Management Authorities do not yet have automated processes and cannot apply modern, electronic approaches for risk identification and targeted inspections. This applies to many developing countries.

The CITES Working Group on Electronic Systems and Information Technologies and the CITES Secretariat supported by competent partners have developed eCITES, a set of standard tools and software solutions which make electronic CITES management now more accessible to all Parties, including those from developing countries, for better protection of their national wild flora and fauna.

eCITES will also facilitate administration of legal trade in wildlife and its integration into the measures of the WTO Trade Facilitation Agreement thus reducing transaction costs and time for compliant traders. This will create opportunities for sustainable development of legal trade in wildlife in developing countries and income opportunities for local communities.

With eCITES and for an investment of 15 million USD, CITES Management Authorities in 100 countries could benefit from automated CITES permit approval and control processes and apply state-of-the-art procedures and techniques to control trade in CITES-listed species and combat illegal trade.

The Secretariat wishes to raise awareness of donor agencies and governments that eCITES solutions are now available and transformative change is possible. The Secretariat aims to gather support for those countries that have already notified the Secretariat of their willingness to implement eCITES and create further momentum for automated and improved CITES permit management around the globe.

About CITES

The *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)* establishes a legally binding regulatory regime to ensure the survival of CITES-listed species in the wild, providing opportunities for sustainable trade and economic development, in particular in developing countries and for local communities. Currently, 182 States and the European Union are Party to this Convention and bound by its rules.

CITES regulates trade in over 36,000 species of wild animals and plants, both aquatic and terrestrial, including emblematic species such as tigers, elephants, rhinos, manta rays and great apes. The core instrument for regulating trade is a system of permits and certificates issued and controlled by a national CITES Management Authority, which has been officially appointed by the government. The CITES permits or certificates document the legality and sustainability of trade and are reported annually to the Secretariat. It is the core instrument to distinguish between legal and illegal trade in wildlife.

About illegal trade in wildlife

Illegal trade in wildlife (excluding illegal trade in marine species and timber) is estimated to be worth up to USD 20 billion per year and it now ranks among trafficking in drugs, arms and human being in term of profits. A number of CITES-listed species are high-value items targeted by transnational criminal groups. These groups are highly organized and operate through international networks. They take advantage of the legitimate opportunities and tools of modern international trade, transport and finance, hiding their illegal shipments in and between the consignments of legal shipments.

Effective application of CITES depends largely on control over the issuance, inspection and acceptance of CITES documentation, and border control agencies around the world are challenged to identify illegal shipments as the vast majority of today's procedures for issuance and control of CITES permits are still paper based. In particular, CITES Management Authorities in developing and least developed countries, often range States of the most vulnerable species, lack the essential forms of electronic information management and exchange⁹ when managing and controlling trade in CITES-listed species.

Since a permit can transform millions of dollars of suspected contraband into millions of dollars of legitimate merchandise, much of the illegal trade in wildlife proceeds through the front door, with paperwork provided through fraud, forgery and corruption.¹⁰ The lack of automation in permit issuance and control provides opportunities for corruption and prevents fast and efficient verification and control of permits using modern methods of border control such as automated risk management and collaboration of border agencies for targeted inspections.

The vast majority of officials responsible for CITES implementation and enforcement are committed to their task and working diligently each day to ensure that international trade is legal, sustainable and traceable. However, criminal networks actively and constantly seek to exploit the automation gaps, and reports of corrupt activities that undermine the effective implementation of the Convention are of increasing concern.

In particular, developing and least developed countries are exposed to a double risk. They are often range States of multiple high value CITES-listed species, which they need to protect, while at the same time, authorities in these countries often lack modern information management tools to effectively monitor and regulate trade in these wildlife assets.

About eCITES

To combat illegal trade in wildlife, to support Management Authorities and to provide income opportunities through legal trade in wildlife, the CITES Secretariat, in collaboration with the CITES Working Group on Electronic Systems and Information Technology and the ASYCUDA programme of the United Nations Conference on Trade and Development (UNCTAD) has now launched the eCITES initiative, a global effort to rapidly streamline and automate CITES permit processes and controls.

eCITES supports Parties in their efforts to automate CITES permit processes, exchange electronic information with customs and other border control agencies, implement modern, automated risk management processes for improved control of trade in CITES-listed species and to prevent use of fake CITES permits in international trade.

eCITES simplifies export and import processes and significantly reduces time and resources spent in the Management Authority for checking and issuing permits thus freeing resources in the agencies to focus on illegal trade. It reduces time for permit request and issuance, thus providing opportunities for trade and development to compliant traders and rural communities.

To make eCITES accessible to developing and least developed countries, a comprehensive set of implementation tools including the *eCITES Implementation Framework*, a standardized approach to plan and manage a project and the *UNCTAD eCITES system*, an off-the-shelf software solution has been developed and is now available to interested Parties.

⁹ Some developing countries such as Brazil, China, Kenya, the Republic of Korea, South Africa, and Thailand have already started to implement eCITES systems.

¹⁰ *World Wildlife Crime Report, United Nations Office on Drugs and Crime, 2016*

A best practice framework for eCITES implementations

The **eCITES Implementation Framework** provides national project managers with a best practice approach to plan and manage the automation of their CITES processes. A standard implementation approach using a tested framework greatly reduces eCITES project's risks and costs and achieves improved results and synergies at the regional and global level. The Framework was developed by experienced project managers taking into account lessons learned from similar projects around the world.¹¹

The *eCITES Implementation Framework* consist of four pillars:

- Automation of the CITES permit issuance process in the Management Authorities, including electronic application of CITES permits; transparent and automated controls during inspection, approval and issuance of all permits; electronic payment of fees and electronic repository of all valid permits;
- Electronic information exchange of CITES permits with customs authorities, automated risk assessment and targeted inspections for export, import and transit and coordinated border controls;
- Automated generation of reports and statistics to monitor legality and sustainability of trade, including CITES annual trade reports; and
- Electronic exchange of CITES permit information between Government authorities of export, import and transit countries to prevent use of forged documents and establish end-to-end control of trade.

Each pillar in the Framework is a project in itself, with a defined outcome and benefits. This means that a country can implement eCITES pillars in a stepwise approach and according to its own readiness.

An off-the-shelf software solution for eCITES

The **eCITES system** is an off-the-shelf software solution for Parties that want to implement eCITES. The system provides automation of all four pillars of the eCITES Implementation Framework. The eCITES system is built on the UNCTAD ASYCUDA technical platform, an electronic system used by nearly 100 customs organizations around the world to manage customs export and import control and clearance.

eCITES is fully based on open, international standards for trade and electronic business defined *inter alia* by the International Organization for Standardization (ISO), the World Customs Organization (WCO), the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) and the World Trade Organization (WTO). It is fully configurable to national legislation and workflows and can exchange standard-based electronic messages with other systems such as the national Single Window or the customs data management system.

The software is provided free of charge and includes source code to develop national extensions. The system is implemented through a joint technical cooperation project between the country and UNCTAD. This project includes CITES management support, national adaptations, redesign of business processes, capacity building and initial operations support.

For the operation of the system two models are available. The system can be maintained in and by the implementing country. Alternatively the country can ask UNCTAD to host and maintain the national eCITES system in UNCTAD's Centre of Excellence in Gibraltar.

For a small to medium sized country, eCITES implementation including capacity building and support to the Management Authority for improved processes and electronic collaboration with customs can be done for approximately USD 150,000.

For further information, contact the CITES Secretariat at Markus.Pikart@CITES.org

¹¹ The Framework is based on The Open Group Architecture Framework (TOGAF) which is often used to plan eGovernment systems such as Single Window.