1. This document has been prepared by the Secretariat.

**Background**

2. At its 13th meeting (CoP13, Bangkok, 2004), the Conference of the Parties discussed issues related to the use of computerized systems to meet obligations set out in the Convention and related Resolutions and Decisions (see document CoP13 Doc. 45). Some Parties expressed the view that the development of an electronic licensing system would greatly assist in the handling and processing of CITES applications, the issue of electronic permits and the collation and dissemination of CITES trade information.

3. Electronic permitting was further discussed by the Conference of the Parties at its 14th meeting (CoP14, The Hague, 2007), where Parties adopted Decision 14.56 directing the Secretariat, in cooperation with the Standing Committee Working Group on the Use of Information Technologies and Electronic Systems, to prepare a CD-ROM and Web-based toolkit on electronic permitting systems for consideration at the 57th meeting of the Standing Committee. The toolkit should include:

   a) advice on the use of common information exchange formats, protocols and standards for use with electronic permitting systems;

   b) advice on the use of electronic signatures and other electronic security measures;

   c) advice on the development and implementation of interoperable information exchange pilot projects on electronic permitting systems;

   d) a list of Parties willing to assist less developed countries in developing electronic permitting systems;

   e) a list of Parties currently using electronic permitting systems; and

   f) information on new developments in the use of electronic documents by relevant organizations.

4. Decision 14.57 also directed the Secretariat to collaborate with the UNEP World Conservation Monitoring Centre (UNEP-WCMC) in the further development and dissemination of Internet-based software tools.

5. Funding to enable fulfilment of Decision 14.56 was received in September 2008. Consequently, it was not possible to complete the draft toolkit on electronic permitting systems in time for consideration at the 57th or 58th meetings of the Standing Committee (Geneva, July 2008 and July 2009). The Secretariat is grateful to the European Community and the United Kingdom of Great Britain and Northern Ireland for...
Progress made in the fulfilment of Decisions 14.56 and 14.57

6. The Secretariat first met with the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT)1 to acquire knowledge on new international standards and norms developed to improve the ability of governments, business, trade and administrative bodies, from developed, developing and transitional economies, to exchange products and relevant services effectively. Discussions also centred on developing methods to facilitate trade processes, procedures and transactions, including the relevant use of information technologies.

7. The World Customs Organization (WCO) was also contacted for information on the WCO Customs Data Model v. 2 and the upcoming WCO Customs Data Model v. 3, and their relevance to the development of CITES electronic permits and certificates. The WCO Customs Data Model establishes a standard, international, harmonized data set that meets governments' requirements for international trade and is geared exclusively to the requirements of an automated environment. The Data Model also provides Parties to the revised Kyoto Convention2 with a global Customs standard to implement provisions dealing with reduced data requirements and electronic submission of declarations and supporting documents.

8. The Secretariat met with the International Air Transport Association (IATA) to discuss possible collaboration with its e-freight3 project. IATA e-freight is an initiative for and by the air cargo supply chain. It involves carriers, freight forwarders, ground handlers, shippers, Customs brokers and Customs authorities. It replaces paper documents with electronic messages, reducing costs, improving transit times, accuracy and the competitiveness of airfreight.

9. Pursuant to paragraph c) of Decision 14.55, the Working Group on Information Technologies and Electronic Systems worked in close collaboration with the Secretariat in drafting guidelines on the use of common information exchange formats, protocols, standards and electronic signatures. This work was greatly facilitated by the joint project between Switzerland and the United Kingdom to exchange electronic information on CITES permits and certificates4 and by the project's use of the recommendations on formats, protocols and standards published in the CITES electronic permitting toolkit.

10. With regard to Decision Conf. 14.57, the participation of the UNEP-WCMC in the Working Group promoted collaborative work concerning the development and dissemination of Internet-based software tools. UNEP-WCMC has collaborated closely with the Working Group and the Secretariat in the development of a project to facilitate the expedition, electronic exchange or verification of CITES-permit data among Management Authorities.

11. At this writing, the Working Group held three meetings, in Bern and Bristol in 2008, and in Geneva in 2009 to discuss implementation of the joint project between Switzerland and the United Kingdom, development of the CITES electronic permitting toolkit, amendments to Resolution Conf. 12.3 (Rev. CoP14), Permits and certificates, to accommodate electronic permitting systems, and other related issues. A meeting is planned to be held prior to fifteenth meeting of the Conference of the Parties (Doha, 13-25 March 2010) to discuss outstanding issues.

12. The Secretariat also had the opportunity to participate in the APEC Symposium on Data Harmonization towards Single Window Paperless Environment which was held on 19 and 20 January 2009 in Bangkok, Thailand. At that meeting, the Secretariat met with UN/CEFACT, Thai authorities implementing their national single window5 environment, and members of the WCO Working Group responsible for the ongoing development of the WCO Customs Data Model. The Secretariat is thankful to Thailand and UN/CEFACT for their advice on harmonizing the CITES electronic permitting toolkit in line with international standards and norms.

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1 http://www.unece.org/cefact/about.htm
2 International Convention on the Simplification and Harmonization of Customs Procedures (http://www.wcoomd.org/home_wco_topics_pfoverviewboxes_tools_and_instruments_pfrevisedkyotoconv.htm)
3 http://www.iata.org/stb/efreight
4 A description of this project was published in the July 2009 (18th issue) of CITES World (http://www.cites.org/eng/news/world/18.pdf).
5 A single window is a facility that allows parties involved in trade and transport to lodge standardized information and documents through a single entry point to fulfill all import, export, and transit-related regulatory requirements. As information is electronic, data need only be submitted once.
13. To keep Parties informed of developments in electronic permitting systems, the Secretariat published an issue of *CITES World*, the official newsletter of the Parties, devoted in its entirety to electronic permitting. Composed of six articles, two of which are by members of the Standing Committee’s Working Group on Information Technologies and Electronic Systems, this issue offers information on: a joint project between Management Authorities to exchange permit data, the implementation of a national electronic permitting system, new initiatives by international organizations to facilitate trade, and new international projects and norms that may impact on the development of national systems.

**The CITES electronic permitting toolkit**

14. The Secretariat began gathering information and contacting the key actors working in the area of electronic commerce after CoP14. Substantive work on the CITES electronic permitting toolkit, however, only began in September 2008 following the receipt of generous financial support from the European Community and use of remaining funds from the United Kingdom.

15. In the planning and design phase of the toolkit, the Secretariat and the Working Group were presented with three primary challenges. First, the toolkit had to be harmonized and compliant with paper-based permitting procedures, so that Parties would have the choice of using new electronic permitting systems or existing paper-based systems. Second, adherence to international standards and norms, particularly those developed by UN/CEFACT and the WCO, was necessary to allow integration with national projects establishing single-window initiatives. Last, the toolkit had to be designed with sufficient flexibility to accommodate future developments in international standards and norms.

16. The toolkit was developed in two steps. The first step was the development of the CITES reference model. This entailed the mapping of the standard CITES permit or certificate as found in Resolution Conf. 12.3 (Rev. CoP14) to the UN/CEFACT’s Core Component Library (CCL) and the WCO Customs Data Model v.2. The CCL is a universal standard to describe semantically documents used in electronic commerce. The building blocks used to describe the standard CITES permit and certificate form are now an integral part of the CCL.

17. The second step was to generate what is commonly called an XML (eXtensible Markup Language) schema for exchanging electronic permitting data. This schema allows developers of electronic permit systems to structure their data according to the semantic descriptions embedded into the CCL. In other words, Parties that utilise the CCL can describe their specific documents using similar semantics and can generate a specific XML schema structure for their own use.

18. Since permits described through an XML schema will share common semantic and syntactical elements, they can be exchanged more easily between or among external computer systems. Most international initiatives attempting to automate commercial data exchanges by converting paper documentation into digital data are also using the CCL and XML. Electronic CITES permits and certificates adhering to this approach will be more easily harmonized with national and international initiatives, particularly in international trade single window environments.

19. The toolkit also addresses issues related to security and electronic signatures, and offers advice to Parties desiring to implement such systems.

20. The Secretariat is thankful for the contributions and advice of the Working Group in the development and review of the toolkit, and to Switzerland and the United Kingdom in their efforts to implement a joint project based on the recommendations in the toolkit. The Secretariat is also thankful to Switzerland for its technical support in the development of the toolkit.

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7 The WCO Customs Data Model v. 3 will be aligned with the CCL. This will greatly facilitate the mapping of documents to these standards.

8 The standard CITES permit and certificate form has been processed successfully by the International Trade and Business Processes Group (TBG17) harmonization team under UN/CEFACT and will be included in the next version of the CCL, which is due for publication before the end of 2009.
Conclusion

21. The CITES electronic permitting toolkit provides Parties which have developed or are developing electronic permitting systems with guidance on interoperability among national electronic permitting systems and compliance with international standards and norms. This will avoid duplication of effort and allow for the exchange of electronic permit data to occur in a timely manner.

22. Parties can immediately use the recommendations in the toolkit to exchange permit data electronically, should they wish to do so. The recommendations also eliminate the need to agree on standards and norms when implementing electronic exchange procedures. At the international level, Parties can integrate CITES electronic permits in single window initiatives which would facilitate trade procedures. For example, IATA implemented a similar strategy and uses the same standards as those of the toolkit in its e-freight initiative. It would be possible, therefore, for Parties adhering to the recommendations in the toolkit to participate in the e-freight programme.

23. The toolkit also represents a new level of cooperation between CITES and organizations and initiatives aiming to facilitate trade, ensure greater security minimize fraud, and harmonize documentation in international commerce. As more Parties adopt new initiatives such as single windows and require electronic documentation as a prerequisite for international trade, CITES will be well poised to adapt quickly while continuing to contribute to these new developments and initiatives.

Recommendations

24. To enable Parties to develop CITES electronic permitting systems that are interoperable and compliant with international standards and norms, the Secretariat recommends that the Conference of the Parties adopt the draft decisions presented in the Annex.
Directed to Parties

15.XX Parties should use the CITES Electronic Permitting Toolkit found on the CITES website to develop or update national electronic permitting systems.

Directed to the Standing Committee

15.XX The Standing Committee shall extend the mandate of its Working Group on Information Technologies and Electronic Systems in order for it to perform the following tasks:

a) gather information from Parties and relevant organizations and initiatives on new developments related to electronic permitting systems, and submit such information to the Secretariat for possible inclusion in the toolkit;

b) collaborate with the Secretariat in updating the toolkit with new information related to the use of common information exchange formats, protocols and standards and electronic signatures;

c) promote the development and use of electronic permitting systems among Parties;

d) examine how electronic permitting can contribute to ensuring legal electronic commerce in specimens of CITES-listed species;

e) invite relevant organizations with knowledge about electronic permitting systems to join the Working Group; and

f) report to the Standing Committee at its regular meetings on the results of its work.

Directed to the Secretariat

15.XX In collaboration with the Working Group on Information Technologies and Electronic Systems, the Secretariat shall:

a) update the CITES electronic toolkit according to new electronic permitting standards and norms;

b) work with relevant international organizations and initiatives related to electronic permitting systems to raise awareness of CITES business procedures and permitting requirements; and

c) organize capacity-building workshops to assist Parties in using the CITES electronic permitting toolkit to develop, implement or update electronic permitting systems.