Progress Report

On EPIX
(Electronic Permit Information eXchange)

for the facilitation of expeditious, electronic exchange or verification of data from CITES permits among Management Authorities

Prepared for the

CITES Secretariat

by the

United Nations Environment Programme -
World Conservation Monitoring Centre

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ABOUT UNEP-WORLD CONSERVATION MONITORING CENTRE

The UNEP World Conservation Monitoring Centre (UNEP-WCMC), based in Cambridge, UK, is the specialist biodiversity information and assessment centre of the United Nations Environment Programme (UNEP), run cooperatively with WCMC, a UK charity. The Centre's mission is to evaluate and highlight the many values of biodiversity and put authoritative biodiversity knowledge at the centre of decision-making. Through the analysis and synthesis of global biodiversity knowledge the Centre provides authoritative, strategic and timely information for conventions, countries and organisations to use in the development and implementation of their policies and decisions.

The **UNEP-WCMC** provides objective and scientifically rigorous procedures and services. These include ecosystem assessments, support for the implementation of environmental agreements, global and regional biodiversity information, research on threats and impacts, and the development of future scenarios.

Background

UNEP-WCMC is currently developing a mechanism to facilitate the expedite electronic exchange or verification of CITES-Permit data among Management Authorities. The tool is being developed so that participant Management Authorities can exchange data regardless of the type of information-management system used by each Authority. This mechanism is being developed in communication with the e-permit CITES working group, which is developing standards for data electronic exchange.

Currently, up to 22 months can elapse between the time when a CITES transaction takes place and the moment when annual reports are produced and the information becomes available in the CITES Trade Database. This poses a challenge for national authorities who often near to validate permit data while the goods are travelling.

The main objectives of EPIX are to:

- Allow Parties to share and exchange permit information electronically in near-real time through a secure website;

- Allow Management Authorities to submit online queries on permits issued by either their own or other Management Authorities;

- Provide near-real time access to permit information to CITES Enforcement Authorities to enable them to verify permit details, therefore aiding the identification and prevention of fraudulent use of permits;

Structure of EPIX

EPIX operates over the internet. CITES Management Authorities are able to make an enquiry about a permit through a secure interface on UNEP-WCMC's website. The system is password protected so only authorised users have access to the system.

There are three routes available to participants for data exchange through EPIX which have been designed so that CITES Management Authorities can participate regardless of the type of information management system they use. These routes are described in more detail below.

a) Automated data provision: For Management Authorities which have systems capable of automatic data exchange

CITES Management Authorities that have developed automatic data transfer tools can establish an exchange protocol with UNEP-WCMC (e.g. via XML) for automated data transfer. This will enable them to either 'push' their data into the central CITES Trade database or have their data 'pulled' into the UNEP-WCMC server at regular intervals; or to provide a service that allows UNEP-WCMC to extract data on demand. We would recommend that any Party wishing to participate via an

automated route develops a schema in accordance with the CITES electronic permitting toolkit (see http://www.cites.org/common/cop/15/doc/E15-30-01T.pdf)

b) Batch data provision: For Management Authorities which can provide permit details in batches (e.g. in csv format)

A complex web-service is <u>not</u> required to participate in EPIX. It is also possible for MAs to add data by sending batches of data periodically. Representatives of Management Authorities can upload their own permit data to UNEP-WCMC (using for example, csv format, such as through an Excel file) via a secure internet interface on a regular basis. The data will only need to conform to a specified format that will then be added automatically to the database. This specific format can be provided to any Party wishing to participate, and will be also available on the website once the interface has been further developed in December 2010.

c) Case-by-case data provisions via email

Parties can participate in EPIX even if they only have access to an email address and the internet. Permit-issuing authorities can verify permit data by email, through a standard secure form, in response to a query submitted by another Party. Once the data are provided by the issuing Party, the information can remain in the central database to serve any future enquiries.

Progress to date

An initial pilot phase to design an automated mechanism for data exchange was developed in consultation with the Czech Republic in late 2009. It is possible for UNEP-WCMC to retrieve CITES data via a web-service developed by the Czech Republic to pull a complete year of CITES trade data, only updated data or filtered data (route a as described above).

In a parallel project, funded by the Authorities of the United Kingdom, a solution for data provision has also been developed to enable Authorities that are not currently able to develop web-services, to provide data in discrete batches (for example in an excel or csv format), which can be uploaded manually through a simple web interface (route b as described above).

We are currently working on development of an email verification system for permits (route c as described above) and expect this to be complete in early 2011.

The current URL for the interface, which is in development, is provided below. A test username and password is provided.

URL : http://epix.unep-wcmc.org/
Login : epixeu
Password : ep1xeu

The Management Authority of the Czech Republic have provided their consent for other CITES Parties to view the current data in the EPIX database to provide an opportunity for testing and feedback. Please note however, that the interface is still a work in progress, and further development will be continuing in early December.

Instructions for use

<u>Search a Permit</u>

If you click on 'Search a Permit', and then enter all or part of a permit number e.g. 08CZ018899 (the box auto-completes), and click search, the Permit data will be displayed. A summary of the permit information is provided at the top, and the detailed species information is provided subsequently.

UNEP-WCMC would be grateful for any comments or suggestions from Parties with regards to the development of the interface so far. Additional information on the relationship between EPIX and the CITES e-permitting project is outlined in Annex 1.

EPIX is designed to enable data exchange among CITES Management Authorities, regardless of the level of technological development of their offices. Participation in EPIX is open to all CITES Parties. UNEP-WCMC will be glad to provide further information about options for participation, and to provide technical support to Authorities as they join EPIX.

Please send queries, comments and suggestions regarding EPIX to:

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Annex A. How EPIX relates to the CITES e-permitting project

Details of the CITES e-permitting initiative are provided in the following documents:

http://www.cites.org/eng/news/world/18.pdf

http://www.cites.org/eng/cop/15/doc/E15-30-01.pdf

http://www.cites.org/common/cop/15/doc/E15-30-01T.pdf

Key aspects of e-permitting:

- An e-permitting solution's natural path is towards the elimination of paper documents. Transactions would rather take place electronically.

- The CITES e-permitting initiative establishes the standards and norms that participants need to adhere to (which translate to a standard "Data Model"). Therefore, if participant A wants to be involved in an e-permitting solution with participant B, then both participants A and B need to have their systems adhering to the specific standards and norms i.e. they need to speak the same dialect and have the same Data Model to be able to communicate with each other.

Within this context, the objective of EPIX is to facilitate expedite exchange and verification of permit/certificate information among Management Authorities, regardless of the current level of development of their national information systems.

Thus, EPIX uses the standards established by the e-permitting project to deliver data to users (i.e. to CITES Management Authorities). Recognising that many National Authorities have already developed their own electronic systems and that these may not comply yet with the standards established by the e-permitting initiative, EPIX collects the data from national systems through individually-tailored mechanisms which are built by UNEP-WCMC in dialogue with each National Authority, to adapt the central system to the mechanisms already in existence in each country. In turn, users wishing to obtain data from EPIX can do so either by consulting a secure internet interface, or by pulling the data using the Data Model designed by the e-permitting initiative.