EPIX Onboarding: Simplifying the implementation of Electronic Permit Information Exchanges between Parties

Terms used in the document

Candidate (Party)	Party that wishes to establish EPIX exchange with other Parties that already engage in EPIX
Sponsor (Party)	An EPIX club member that supports the Candidate in the onboarding process
EPIX club	Al Parties that completed the onboarding process and already exchange EPIX with other Parties

Background

Electronic Permit Information eXchange (EPIX) is the exchange of electronic CITES permits and related information between CITES Parties using CITES recommended standards for this exchange. EPIX replaces exchange of paper permits between these Parties.

The electronic information is exchanged directly between Parties (Point to Point exchanges). This means that a new Party that intends to implement electronic exchanges with other Parties needs to establish and test these interchanges with all other Parties. This can cause undue workload, both on the side of the Candidate Party and on the side of the Parties that have already established EPIX exchanges, in particular as the number of Parties that exchange permits in electronic format increases[1].

The EPIX onboarding process described in in this paper aims to simplify the onboarding of a new Party by implementing a simplified onboarding process which requires only one test between the Candidate Party and one established EPIX Party. This reduces workload and costs both for the established EPIX members and for the onboarding Party and leads to a simplified and standardized accession process.

This document is drafted at a very early time in EPIX implementation. As more experience with EPIX becomes available this document will have to be revised and further developed. Further revisions of this document will be managed by the EPIX club members with the support of the Secretariat.

---

[1] If *N* is the number of Parties that exchange electronic Permits with each other and the implementation would require that each Party tests the exchange with each other Party then the number of tests required is *N(N-1)*

Parties should be aware that participation in the EPIX onboarding process as described in this document is entirely voluntary. Parties may at any time establish electronic permit exchanges based on rules and procedures set out in bilateral agreements[2].

Overview

The EPIX onboarding process is based on 3 Phases: Preparation, takeoff and operation

- During the preparation the Candidate Party completes all technical and organizational steps required prior to engage and test EPIX exchanges with the Sponsor. The outcome of this phase is an EPIX engagement report that is the basis for the takeoff test.
- The takeoff tests is a series of structured technical and functional tests between the Candidate and the Sponsor. The results of the takeoff tests are documented in a protocol.
- On the basis of the takeoff protocol the Candidate Party will conclude EPIX interchange agreements[3] with other EPIX Club Members.

EPIX onboarding is established on the following principles:

- Onboarding starts with a preparatory phase between the Secretariat and the Candidate Party. This phase does not draw on resources of club member Parties.
- Tests between Candidate and Sponsor will start after completion of the preparatory phase when the Candidate is ready for EPIX data exchanges.
- Tests between Candidate and Sponsor are exemplary, i.e. the Sponsor tests the exchange on behalf of all other club members
- On successful completion of the test the Candidate becomes a club member and a potential future Sponsor for other Candidate Parties
- Club Members will review on a regular basis documents and procedures for onboarding to incorporate lessons learned

EPIX Onboarding Phases: Preparation Phase

The Preparation Phase supports the Candidate Party in its preparation for EPIX with the objective to reduce time and costs and ensure the best possible initial condition for the takeoff tests. .

---

[2] Conf. 12.3 (Rev. CoP17) states that there is no obligation of Parties to issue CITES permits and certificates in electronic format and that the exclusive use of electronic permits between Parties requires a specific agreement between these Parties.

[3] An interchange agreement (MoU) between two Parties exchanging electronic permit information is required by Conf. 12.3 (Rev. CoP17) *RECOGNIZING that Parties issuing permits or certificates in electronic formats will need to issue them also in paper format unless specific agreement has been reached with other affected Parties*;

The Secretariat is the focal point to support the Candidate Party in the preparatory process. The role of the Secretariat is to ensure that the Candidate Party is aware of the activities and requirements relating to EPIX exchange and that all preparatory conditions are met before takeoff testing is started.

The Preparatory Phase has a managerial and a technical track. The managerial track includes understanding and agreement of EPIX objectives, activities, resource requirements, responsibilities, project schedule and outcomes. The technical track include system development, electronic permit exchanges with national Customs, standards and conformance tests and documentation of permit processes.

A more detailed description of the activities in the Preparation Phase is described in Annex 1 of this document.

EPIX Onboarding Phases: Takeoff Phase

The Takeoff Phase is a series of structured technical and functional tests between the Candidate and the Sponsor which builds on the outcomes of the Engagement report.

During this phase messages are exchanged to test a set of standard CITES permit use case scenarios such as issuance of a permit, inquiring the status of a permit, cancellation of a permit, adjustment of actual quantities, etc.

The scope of the Takeoff tests and their results are reported in a Takeoff protocol. This protocol will also include any specifications in EPIX exchanges with the Candidate Party, for example use of national Single Window or Customs services, specific permit processes of the Candidate Party, business processes that are not handled electronically, etc.

The Sponsor will summarize the findings of the Takeoff phase in a recommendation to the Candidate Party.

A more detailed description of the activities in the Takeoff Phase is described in Annex 2 of this document.

EPIX Onboarding Phases: Operation Phase

On the basis of the takeoff protocol the Candidate Party will conclude EPIX Interchange Agreements[4] with EPIX Club Members. The Interchange Agreement sets out the rules [5]for the exchange of permit information between the Parties. The CITES Working Group on

---

[4] Interchange agreement between two EPIX Parties are required through Conf. 12.3 (Rev. CoP17)
RECOGNIZING that Parties issuing permits or certificates in electronic formats will need to issue them also in paper format unless specific agreement has been reached with other affected Parties;
[5] For a model of an Interchange Agreement see UN/CEFACT Recommendation 26,
http://tfig.unece.org/contents/recommendation-26.htm

Electronic Systems and Information Technologies intends to develop a template of an EPIX Interchange Agreement.

While the EPIX Engagement and Takeoff reports constitute a proof of readiness for the Candidate Party, it is entirely up to Parties to conclude an EPIX Interchange Agreement and engage in electronic exchanges of Permits.

The Parties will send a copy of interchange agreements they have concluded to the Secretariat for publication on the CITES Website.

A more detailed description of the content of an Interchange agreement is provided in Annex 3 of this document.

Annex 1 Preparation Phase

Managerial track:

- General understanding of EPIX; architecture, principles, standards, national requirements
- Current state of EPIX: What are other Parties doing, Implemented and planned EPIX exchanges, EPIX standards and working documents, latest developments
- EPIX national scoping:
    - What are the national objectives and priorities for EPIX
    - Who are priority Parties for the exchange
    - Assessment of national readiness (technical/managerial)
    - Gap analysis: What needs to be done?
    - Resource analysis: What can be done?
    - Scoping document: objectives, outcomes, benefits, costs
- Organization of Preparatory Phase
    - Managerial and technical focal points
    - Regular steering meetings and communication methods
    - Reporting
- Assessment
    - High level description of current permit processes (as-is situation)
    - Description of electronic workflows under EPIX (to-be situation)
    - List of activity areas
- Time and resource management
    - Budget planning
    - Time planning
    - Definition of milestones and outcomes
- EPIX engagement report
    - Checklist for EPIX engagement report
    - Review of implementation of the Review Phase
    - Submission of the report to the Secretariat
    - Review and final joint report

Technical track:

- Ensure that technical team understands all EPIX standards and documents and has access to latest documents
- Mapping of to-be situation into software requirements and changes
- Technical implementation plan
- Development of a test plan and protocol
- Development of a test bed and XML messages (electronic Permits)
- eCITES XML conformance testing (GEFEG Schema validator)

- Checklist and report on of test protocol for Engagement report

Annex 2 Takeoff Phase

- Preparatory meeting between the Sensor and the Candidate Party
  - Discuss Engagement report
  - Agree on EPIX scenarios to be tested including messages
  - Timeline and resources
  - Organization of Takeoff Phase
    - Managerial and technical focal points
    - Regular steering meetings and communication methods
    - Reporting
- Takeoff testing and validation
- EPIX Takeoff report
  - Joint drafting of the report
  - Sponsor drafts summary and recommendation
  - Review and final joint report

Annex 3 Content of EPIX Interchange Agreements

The MoU should include agreements on:

  - Accept and agree to EPIX Terms of Service
    - Acceptance of ePermits etc.
    - Acceptance of availability requirements
    - Acceptance of Security requirements
  - Existence of a national eCITES System
    - Ability to process CITES export applications and to issue electronic permits with a national IT-System (eCITES)
    - Ability to make CITES export permits available through a WebService
    - Ability of the national eCITES-systems to process (send/receive) the standard EPIX service calls:
      - GET NON-FINAL
      - CONFIRM QUANTITIES
      - GET FINAL
  - Standard Test Suite
    - Use of an automated test environment between national system and the Onboarding test tools
  - Standard EPIX Adapter to connect national eCITES system with EPIX ensuring security, control and logging of incoming and outgoing EPIX exchanges and management of the connections